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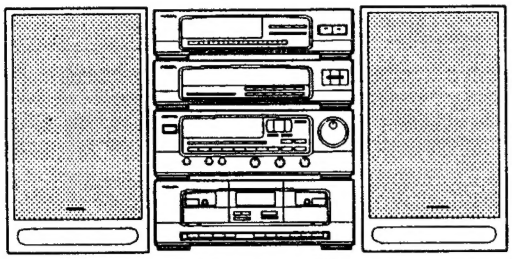
aiwa SERVICE

Z-D8100M

SERVICE MANUAL



COMPACT DISC STEREO SYSTEM

- BASIC TAPE MECHANISM : 2ZM – 1P1N,R1N
- BASIC CD MECHANISM : KSM – 2101ABM
- TYPE. EE,HE,LH,EEZ

♠This service manual contains service information for only altered and added sections of Model Z – D8100M.
If requiring other service information, see the service manual of Model Z – D7000M (S/M Code No. 0266). + 1086 1/26/03/4

CENTER SYSTEM	AMPLIFIER	CASSETTE DECK	TUNER	GRAPHIC EQUALIZER	SPEAKER	CD PLAYER (OPTIONAL)	TURNTABLE (OPTIONAL)
Z – D8100M LH,HE	MX – Z8100M	FX – WZ9100	TX – Z9100	GE – Z9100	SX – Z9100	DX – Z9100M	PX – E900
Z – D8100M EE,EEZ	MX – Z8100M	FX – WZ9100	TX – Z9100	GE – Z9100	SX – Z9100	DX – Z9100M	PX – E800

S/M Code No. 09 – 946 – 064 – 501

SPECIFICATIONS

TUNER TX-Z9100

<FM section>

Frequency range	87.5 MHz to 108 MHz
Usable sensitivity (IHF)	2.2 µV (75 ohms) 18.2 dBf
Alternate channel selectivity	50 dB (±400 kHz)
Signal-to-noise ratio	70 dB (STEREO), 78 dB (MONO)
Harmonic distortion	0.3% (MONO), 1 kHz 0.8% (STEREO), 1 kHz
Frequency response	20 Hz to 15 kHz (+0.5 dB/–3 dB)
Stereo separation	40 dB at 1 kHz
Antenna	75 ohms (unbalanced)

<AM section: YH, YLH>

Frequency range	YH: 531 (530) kHz to 1,602 (1,710) kHz YLH: 530 (531) kHz to 1,710 (1,602) kHz
Usable sensitivity	300 µV/m
Selectivity	22 dB (9 kHz)
Signal-to-noise ratio	53 dB (100 dB input)
Antenna	Loop antenna

<MW section: YEE, YEZ>

Frequency range	522 kHz to 1,611 kHz
Usable sensitivity	400 µV/m
Selectivity	22 dB (9 kHz)
Signal-to-noise ratio	53 dB (100 dB input)
Antenna	Loop antenna

<LW section: YEE, YEZ>

Frequency range	144 kHz to 290 kHz
Usable sensitivity	1,000 µV/m
Antenna	Loop antenna

<Timer section and general>

Program timer	"Once" and/or "every"
Sleep timer	Capable of setting in 10-minute increments, 99 minutes maximum
Dimensions (W × H × D)	360 × 88 × 315 mm (14¼ × 3½ × 12½ in.)
Weight	2.3 kg (5.28 lb.)

AMPLIFIER MX-Z8100

Power output	Front: HE, LH: 75 W + 75 W (6 ohms, T.H.D. 10%, 1 kHz) EE, EZ: 65 W + 65 W (6 ohms, T.H.D. 1%, 1 kHz) Rear: 15 W + 15 W (16 ohms)
Harmonic distortion	0.1% (25 W, 1 kHz, 6 ohms)
Input sensitivity (load impedance)	VIDEO 1/DAT: 300 mV (39 kohms) VIDEO 2/AUX: 500 mV (39 kohms) PHONO IN: 500 mV or more (36 kohms)
Signal-to-noise ratio	80 dB
Power requirements	HE, LH: 120/220/240 V AC selectable, 50/60 Hz EE, EZ: 230 V AC, 50 Hz
Power consumption	HE, LH: 140 W (System total 170 W) EE, EZ: 360 W (System total 400 W)
Dimensions (W × H × D)	360 × 128 × 332 mm (14¼ × 5⅛ × 13⅛ in.)
Weight	HE, LH: 7.4 kg (16.28 lb.) EE, EZ: 9.1 kg (20.02 lb.)

CASSETTE DECK FX-WZ9100

Track format	4 tracks, 2 channels
Frequency response	METAL tape: 20 – 17,000 Hz CrO_2 tape: 20 – 16,000 Hz Normal tape: 20 – 15,000 Hz
Signal-to-noise ratio	70 dB (DOLBY C NR ON, METAL tape peak level above 5 kHz)
Wow and flutter	0.12% (WRMS) ± 0.19% (WPEAK)
Tape speed	4.8 cm/sec. (1⅞ ips) 9.5 cm/sec. (double speed)
Rewind time	120 sec. (C-60)
Fast forward time	120 sec. (C-60)
Recording system	AC bias
Erase system	AC erase
Motor	DC servomotor × 2
Heads	Playback head × 1 (deck 1) Record/playback/erasure head × 1 (deck 2)
Dimensions (W × H × D)	360 × 128 × 309.5 mm (14¼ × 5⅛ × 12¼ in.)
Weight	3.0 kg (6.6 lb.)

GRAPHIC EQUALIZER GE-Z9100

Input	210 mV (47 kohms)
Output	210 mV (47 kohms)
Dimensions (W × H × D)	360 × 88 × 308 mm (14¼ × 3½ × 12¼ in.)
Weight	2.2 kg (4.84 lb.)

SPEAKER SX-Z9100

Cabinet type	3 way, bass reflex
Speaker	220 mm cone type woofer 60 mm cone type tweeter 30 mm ceramic type super tweeter
Impedance	6 ohms
Music power	80 W
Output sound pressure level	90 dB/W/m
Dimensions (W × H × D)	290 × 530 × 230 mm (11½ × 20⅞ × 9⅛ in.)
Weight	7.3 kg (16 lb. 2 oz.)

COMMON SECTION

Power requirements	HE, LH: 120/220/240 V AC selectable, 50/60 Hz EE, EZ: 230 V AC, 50 Hz
Dimensions (W × H × D)	940 × 530 × 332 mm (37⅛ × 20⅞ × 13⅛ in.) (vertical placement) 1,300 × 530 × 332 mm (51¼ × 20⅞ × 13⅛ in.) (horizontal placement)
Weight	HE, LH: 29.5 kg (64.9 lb.) EE, EZ: 31.2 kg (68.64 lb.)

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- The word "BBE" and the "BBE symbol" are trademarks of BBE Sound, Inc.
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MODEL NO.

MX − Z8100M

ALTERATION PARTS LIST

ELECTRICAL MAIN PARTS LIST

DESCRIPTIONで判断できない物は "REFERENCE NAME LIST" を参照してください。
If can't understand for Description please kindly refer to "REFERENCE NAME LIST".

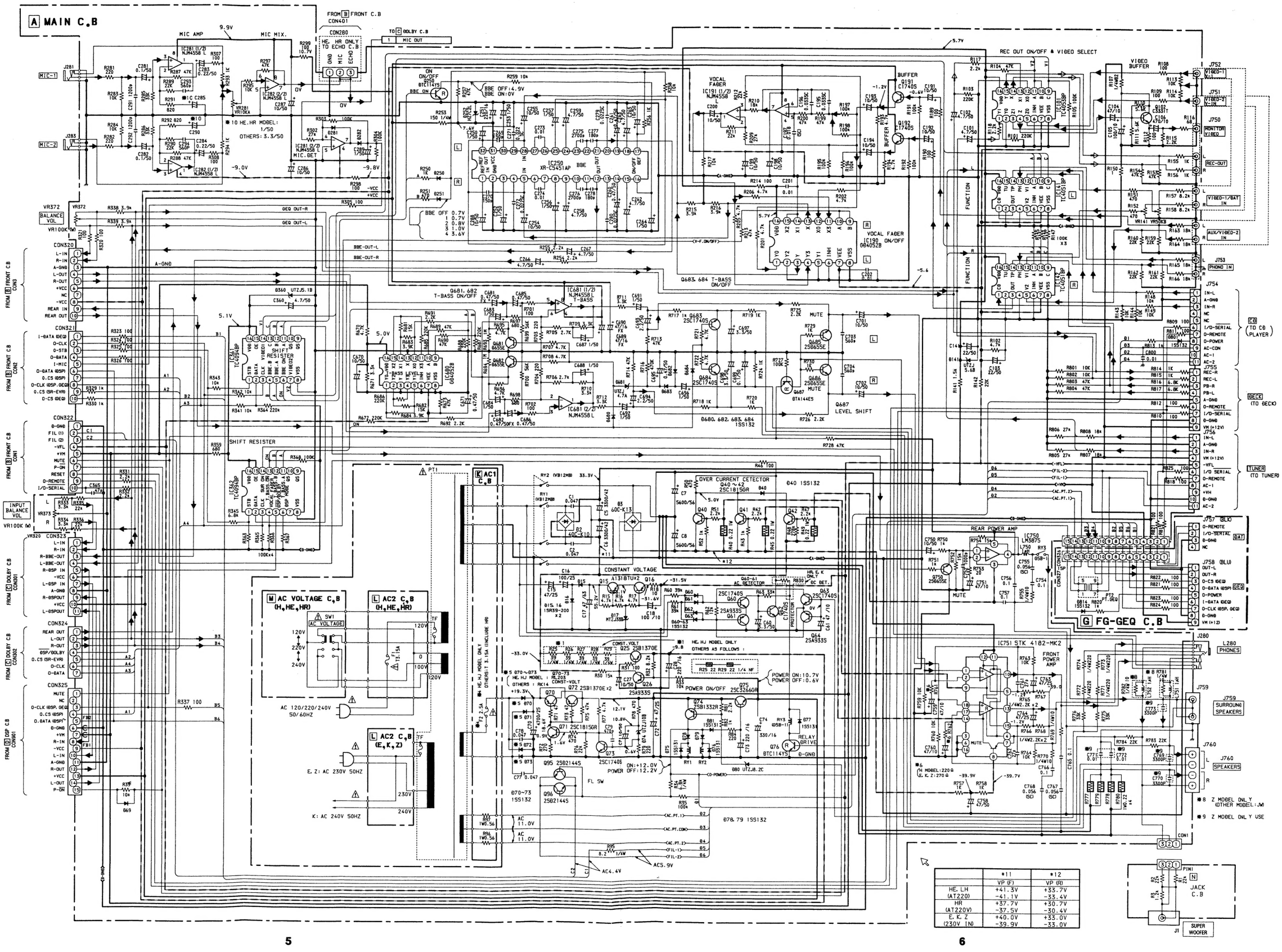
REF. NO	PART NO.	ｶﾝﾘ NO.	DESCRIPTION
IC			
	87-027-938-019		IC, TC4053BP
	87-027-958-019		IC, TC4051BP
	87-017-448-019		IC, GD4052B
	87-017-374-019		IC, TC4094BP
MISCELLANEOUS			
⚠	87-050-034-019		AC CORD ASSY, E<HE, EE, EEZ>
⚠	87-034-749-019		AC CORD, H W/PLUG(LH)
⚠	87-085-184-010		BUSHING, AC CORD D(LH)
⚠	87-085-185-010		BUSHING, AC CORD E<HE, EE, EEZ>

■ ACCESSORIES／PACKAGE LIST (MX − Z8100M)

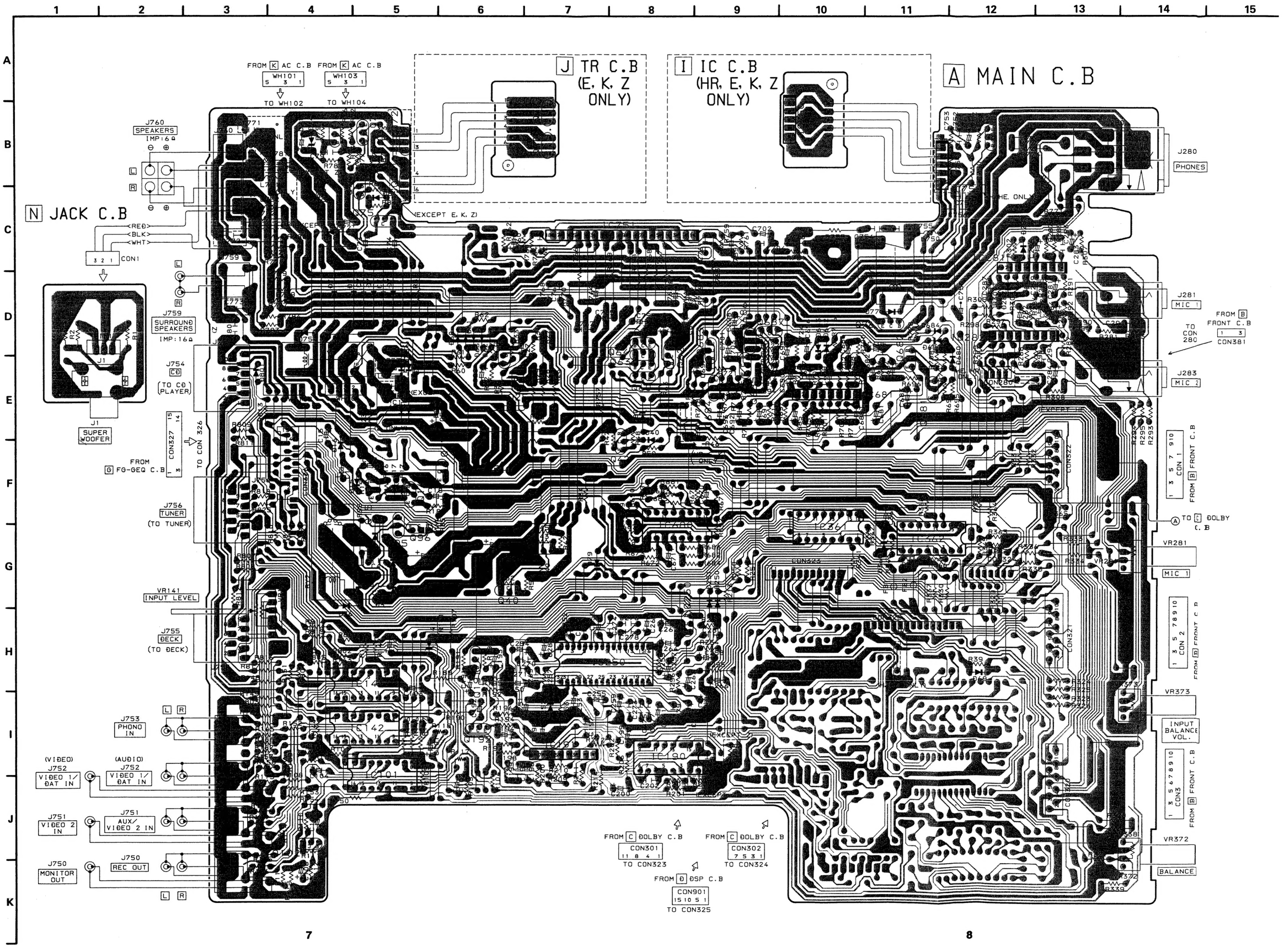
DESCRIPTIONで判断できない物は "REFERENCE NAME LIST" を参照してください。
If can't understand for Description please kindly refer to "REFERENCE NAME LIST".

REF. NO	PART NO.	ｶﾝﾘ NO.	DESCRIPTION
1	84-VP4-901-019		IB, ESC(S)
2	84-VP4-902-019		IB, GFI(S) <EE, EEZ>
3	87-009-724-019		PLUG, ADPTR IR39(LH)
4	87-009-725-019		PLUG, ADPTR IR40(HE)
5	82-VP1-644-019		RC, RC-TZ7000MF(LH, HE)
6	82-VP1-647-019		RC, RC-TZ7000ML<EE, EEZ>

SCHEMATIC DIAGRAM (MX – Z8100M)



	※11	※12
	VP (F)	VP (R)
HE, LH (AT220)	+41.3V	+33.7V
	-41.1V	-33.4V
HR (AT220V)	+37.7V	+30.7V
	-37.5V	-30.4V
E, K, Z (230V IN)	+40.0V	+33.0V
	-39.9V	-33.0V


A MAIN C.B
J TR C.B (E, K, Z ONLY)
I IC C.B (HR, E, K, Z ONLY)
N JACK C.B
FROM K AC C.B WH101 TO WH102
FROM K AC C.B WH103 TO WH104
J760 SPEAKERS IMP:6Ω
J759 SURROUND SPEAKERS IMP:16Ω
J754 CD (TO CD PLAYER)
J1 SUPER WOOFER
J756 TUNER (TO TUNER)
VR141 INPUT LEVEL
J755 DECK (TO DECK)
J753 PHONO IN
J752 VIDEO 1/DAT IN (VIDEO)
J752 VIDEO 1/DAT IN (AUDIO)
J751 VIDEO 2 IN
J751 AUX/VIDEO 2 IN
J750 MONITOR OUT
J750 REC OUT
J280 PHONES
J281 MIC 1
J283 MIC 2
FROM B FRONT C.B CON381
TO CON 280
TO CON 326
FROM G FG-GEQ C.B
TO C DOLBY C.B
VR281 MIC 1
VR373 INPUT BALANCE VOL.
VR372 BALANCE
FROM C DOLBY C.B CON301 TO CON323
FROM C DOLBY C.B CON302 TO CON324
FROM D DSP C.B CON901 TO CON325
(EXCEPT E, K, Z)

ALTERATION PARTS LIST (MX－Z8100M)
MECHANICAL PARTS LIST

DESCRIPTIONで判断できない物は "REFERENCE NAME LIST" を参照してください。
If can't understand for Description please kindly refer to "REFERENCE NAME LIST ".

REF. NO	PART NO.	ｶﾝﾘ NO.	DESCRIPTION
1	82-VP2-011-019		CAB, STEEL
2	87-050-034-019		AC CORD ASSY, E〈HEJ, EE, EEZ〉
2	87-050-075-019		AC CORD ASSY, H〈LH〉
3	87-085-184-010		BUSHING, AC CORD〈LH〉
3	87-085-185-010		BUSHING, AC CORD〈HEJ, EE, EEZ〉
4	84-VP4-004-019		PANEL, REAR EEBN〈EE〉
4	84-VP4-005-019		PANEL, REAR EZBN〈EEZ〉
4	84-VP4-007-019		PANEL, REAR LHBN〈LH〉
4	84-VP4-008-019		PANEL, REAR HEJBN〈HEJ〉
16	84-VP4-001-019		CAB, FR〈EE, EEZ〉
16	84-VP4-002-019		CAB, FR〈LH〉
16	84-VP4-003-019		CAB, FR〈HEJ〉
26	Not used		

MODEL NO.

FX－WZ9100

This service manual contains service information for only altered sections of Model FX－WZ9100.
If requiring other service information, see the service manual of Model FX－WZ7000.

ALTERATION MAIN PARTS LIST

DESCRIPTIONで判断できない物は "REFERENCE NAME LIST" を参照してください。
If can't understand for Description please kindly refer to "REFERENCE NAME LIST ".

ELECTRICAL MAIN PARTS LIST

REF.NO.	PART NO.	DESCRIPTION
C216	87-010-197-089	C-CAP,S 0.01-25 B
C610	87-010-196-089	C-CAP,S 0.1-25 F
L907	87-003-102-089	COIL,10UH

MECHANICAL PARTS LIST

REF.NO.	PART NO.	DESCRIPTION
1-3	84-VW1-004-019	PANEL,REAR (YJ)
1-3	84-VW1-005-019	PANEL,REAR (Y)
1-15	09-047-747-010	CAB,FR ASSY
1-17	84-VW1-002-019	BOX,CASS 1
1-18	84-VW1-003-019	BOX,CASS 2

MODEL NO.

TX – Z9100

This service manual contains service information for only altered sections of Model TX – Z9100.
If requiring other service information, see the service manual of Model TX – Z7000.

ALTERATION PARTS LIST

MECHANICAL PARTS LIST

DESCRIPTIONで判断できない物は "REFERENCE NAME LIST" を参照してください。
If can't understand for Description please kindly refer to "REFERENCE NAME LIST".

REF. NO	PART NO.	カンリ NO.	DESCRIPTION
3	84-VT1-006-019		PANEL, REAR YLHBN〈YLH〉
3	84-VT1-002-019		PANEL, REAR YEEBN〈YEE〉
3	84-VT1-005-019		PANEL, REAR YHJBN〈YHJ〉
3	84-VT1-003-019		PANEL, REAR YEZBN〈YEZ〉
8	84-VT1-001-019		CAB, FR
17	81-VX1-207-110		HLDR, WIRE〈YEE, YEZ〉
18	87-038-039-019		WIRE BINDER〈YEE, YEZ〉

MODEL NO.

GE – Z9100

This service manual contains service information for only altered sections of Model GE – Z9100.
If requiring other service information, see the service manual of Model GE – Z7000.

ALTERATION PARTS LIST

MECHANICAL PARTS LIST

DESCRIPTIONで判断できない物は "REFERENCE NAME LIST" を参照してください。
If can't understand for Description please kindly refer to "REFERENCE NAME LIST".

REF.NO	PART NO.	ｶﾝﾘ NO.	DESCRIPTION
3	84-VU1-002-019		PANEL, REAR YBN〈Y〉
3	84-VU1-003-019		PANEL, REAR YJBN〈YJ〉
8	84-VU1-001-019		CAB, FR

MODEL NO.

SX – Z9100

MECHANICAL PARTS LIST

DESCRIPTIONで判断できない物は "REFERENCE NAME LIST" を参照してください。
If can't understand for Description please kindly refer to "REFERENCE NAME LIST".

REF. NO	PART NO.	カンリ NO.	DESCRIPTION
1	84-VS1-002-010		PANEL W
2	84-VS1-008-010		PANEL TW. ASSY
3	84-VS1-005-010		GRILL FRAME ASSY
4	84-VS1-602-010		SPEAKER WOOFER
5	83-NSD-604-010		SPEAKER TWEETER
6	83-149-611-010		TERMINAL〈YJ, YL〉
7	83-133-630-010		INDUCTOR 0.3mH〈YJ, YL〉
8	87-010-006-010		CAP. E 3.3μF〈YJ, YL〉
9	81-672-612-010		SPEAKER CORD〈YJ, YL〉

REFERENCE NAME LIST

ELECTRICAL SECTION

DESCRIPTION	REFERENCE NAME
ANT	ANTENNAS
C-	CHIP
C-CAP	CAP, CHIP
C-CAP TN	CAP, CHIP TANTALUM
C-COIL	COIL, CHIP
C-DI	DIODE, CHIP
C-DIODE	DIODE, CHIP
C-FET	FET, CHIP
C-FOTR	FILTER, CHIP
C-JACK	JACK, CHIP
C-LED	LED, CHIP
C-RES	RES, CHIP
C-SFR	SFR, CHIP
C-SLIDE SW	SLIDE SWITCH, CHIP
C-SW	SWITCH, CHIP
C-TR	TRANSISTOR, CHIP
C-VR	VOLUME, CHIP
C-ZENER	ZENER, CHIP
CAP, CER	CAP, CERA-SOL
CAP, E	CAP, ELECT
CAP, M/F	CAP, FILM
CAP, TC	CAP, CERA-SOL
CAP, TC-U	CAP, CERA-SOL SS
CAP, TN	CAP, TANTALUM
CERA FIL	FILTER, CERAMIC
CF	FILTER, CERAMIC
DL	DELAY LINE
E/CAP	CAP, ELECT
FILT	FILTER
FLTR	FILTER
FUSE RES	RES, FUSE
MOT	MOTOR
P-DIODE	PHOTO DIODE
P-SNSR	PHOTO SENSER
P-TR	PHOTO TRANSISTOR
POLY VARI	VARIABLE CAPACITOR
PPCAP	CAP, PP
PT	POWER TRANSFORMER
PTR, RES	PTR, MELF
RC	REMOTE CONTROLLER
RES NF	RES, NON-FLAMMABLE
RESO	RESONATOR
SHLD	SHIELD
SOL	SOLENOID
SPKR	SPEAKER
SW, LVR	SWITCH, LEVER
SW, RTRY	SWITCH, ROTARY
SW, SL	SWITCH, SLIDE
TC CAP	CAP, SERA-SOL
THMS	THERMISTOR
TR	TRANSISTOR
TRIMMER	CAP, TRIMMER
TUN-CAP	VARIABLE CAPACITOR
VIB, CER	RESONATOR, CERAMIC
VIB, XTAL	RESONATOR, CRYSTAL
VR	VOLUME
ZENER	DIODE, ZENER
サージサプレッサ	SERGESUPPRESSOR
セラコン	CAP,CERA

サービス技術ニュース	
番 号	連絡内容
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MECHANICAL SECTION

DESCRIPTION	REFERENCE NAME
ADHESHIVE	SHEET ADHESHIVE
AZ	AZIMUTH
BAR-ANT	BAR-ANTENNA
BAT	BATTERY
BATT	BATTERY
BRG	BEARING
BTN	BUTTON
CAB	CABINET
CASS	CASSETTE
CHAS	CHASSIS
CLR	COLLAR
CONT	CONTROL
CRSR	CURSOR
CU	CUSHION
CUSH	CUSHION
DIR	DIRECTION
DUBB	DUBBING
FL	FRONT LOADING
FLY-WHL	FLYWHEEL
FR	FRONT
FUN	FUNCTION
G-CU	G-CUSHION
HDL	HANDOL
HIMERON	CLOTH
HINGE, BAT	HINGE, BATTERY
HLDR	HOLDER
HT-SINK	HEAT SINK
IB	INSTRUCTION BOOKLET
IDLE	IDLER
IND, L-R	INDICATOR, L-R
KEY, CONT	KEY, CONTROL
KEY, PRGM	KEY, PROGRAM
KNOB, SL	KNOB, SLIDE
LBL	LABEL
LID, BATT	LID, BATTERY
LID, CASS	LID, CASSETTE
LVR	LEVER
P-SP	P-SPRING
PANEL, CONT	PANEL, CONTROL
PANEL, FR	PANEL, FRONT
PRGM	PROGRAM
PULLY, LOAD MO	PULLY, LOAD MOTOR
RBN	RIBBON
S-	SPECIAL
SEG	SEGMENT
SH	SHEET
SHLD-SH	SHIELD-SHEET
SL	SLIDE
SP	SPRING
SP-SCREW	SPECIAL-SCREW
SPACER, BAT	SPACER, BATTERY
SPR	SPRING
SPR-P	P-SPRING
SPR-PC-PUSH	P-SPRING, C-PUSH
T-SP	T-SPRING
TERM	TERMINAL
TRIG	TRIGGER
TUN	TUNING
VOL	VOLUME
W	WASHER
WHL	WHEEL
WORM-WHL	WORM-WHEEL
ジグアーム	ARM,SHAFT
ジグガイド	GUIDE,SHAFT
ストラップ	STRAP
トクナベ	S-SCRW
ヒンジ	HINGE
ヒンジビス	S-SCRW
ビスセレート	SCRW,SERRART

723019, 921502, 750038

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Printed in Singapore

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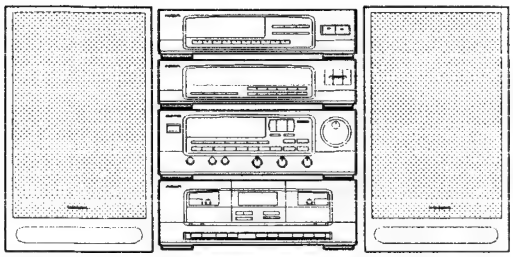
Z-D7000M

SERVICE MANUAL



COMPACT DISC STEREO SYSTEM

- BASIC TAPE MECHANISM : 2ZM – 1P1N,R1N
- BASIC CD MECHANISM : KSM – 2101ABM
- TYPE. HE,LH,HR,E,K,Z

※CENTER SYSTEM	AMPLIFIER	CASSETTE DECK	TUNER	GRAPHIC EQUALIZER	SPEAKER	CD PLAYER (OPTIONAL)	TURNTABLE (OPTIONAL)
Z – D7000M HE,LH,HR	MX – Z7000M	FX – WZ7000	TX – Z7000	GE – Z7000	※1 SX – Z7000	※2 DX – Z980M, DX – Z950M, DX – Z900M, DX – Z850, DX – Z830	※3 PX – E900, PX – E750
Z – D7000M E,K,Z	MX – Z7000M	FX – WZ7000	TX – Z7000	GE – Z7000	※1 SX – Z7000	※2 DX – Z950M, DX – Z900M, DX – Z850, DX – Z830, DX – Z7000M	※3 PX – E800, PX – E750

※1 CENTER SYSTEM dose not have ※1.

※2 As to the service information of CD PLAYER, see the individual service manual of original.

※3 As to the service information of TURNTABLE see the individual service manual of original.

S/M Code No. 0266 DATE OF ISSUE 6/1993 – K

TABLE OF CONTENTS

SPECIFICATIONS

TUNER TX-Z7000

<FM section>

Frequency range	87.5 MHz to 108 MHz
Usable sensitivity (IHF)	2.2 µV (75 ohms) 18.2 dBf
Alternate channel selectivity	50 dB (±400 kHz)
Signal-to-noise ratio	70 dB (STEREO), 78 dB (MONO)
Harmonic distortion	0.3% (MONO), 1 kHz 0.8% (STEREO), 1 kHz
Frequency response	20 Hz to 15 kHz (+0.5 dB, −3 dB)
Stereo separation	40 dB at 1 kHz
Antenna	75 ohms (unbalanced)

<AM section> (YH, YLH)

Frequency range	531 (530) kHz to 1,602(1,710) kHz
Usable sensitivity	400 µV/m
Selectivity	22 dB (9 kHz)
Signal-to-noise ratio	53 dB (100 dB input)
Antenna	Loop antenna

<MW section> (YE, YZ)

Frequency range	522 kHz to 1.611 kHz
Usable sensitivity	400 µV/m
Selectivity	22 dB (9 kHz)
Signal-to-noise ratio	53 db (100 dB input)
Antenna	Loop antenna

<LW section> (YE, YZ)

Frequency range	144 kHz to 290 kHz
Usable sensitivity	1,000 µV/m
Antenna	Loop antenna

<Timer section and general>

Program timer	"Once" and/or "every"
Sleep timer	Capable of setting in 10 minute increments, 99 minutes maximum
Dimensions (W×H×D)	360 x 88 x 315 mm (14¼ x 3½ x 12½ in.)
Weight	2.3 kg (5.28 lb.)

AMPLIFIER MX-Z7000

Power output	Front: H, HE, HR: 75W+75W (6 ohms, T.H.D. 10%, 1 kHz) E, K, Z: 65W+65W (6 ohms, T.H.D. 1%, 1 kHz) Rear: 15W+15W (16 ohms)
Harmonic distortion	0.1% (25W, 1 kHz, 6 ohms)
Input sensitivity (load impedance)	VIDEO 1/DAT: 300 mV (39 kohms) VIDEO 2/AUX: 500 mV (39 kohms) PHONO IN: 500 mV or more (36 k ohms)
Signal-to-noise ratio	80 dB
Power requirements	H, HE, HR: 120/220/240 V AC selectable, 50/60 Hz E, Z: 230 V AC, 50 Hz K: 240 V AC, 50 Hz
Power consumption	H, HE: 140W (System total 170W) HR: 170W (System total 210W) E,K,Z: 360W (System total 400W)
Dimensions (W×H×D)	360 x 128 x 332 mm (14¼ x 5⅛ x 13⅛ in.)
Weight	H, HE: 7.4kg (16.28 lb.) HR: 8.3kg (18.26 lb.) E, K, Z: 9.1kg (20.02 lb.)

CASSETTE DECK FX-WZ7000

Track format	4 tracks, 2 channels
Frequency response	METAL tape: 20−17,000 Hz CrO_2 tape: 20−16,000 Hz Normal tape: 20−15,000 Hz
Signal-to-noise ratio	70 dB (DOLBY C NR ON, METAL tape peak level above 5 kHz)
Wow and flutter	0.12 % (WRMS)±0.19 % (WPEAK)
Tape speed	4.8 cm/sec. (1⅞ ips) 9.5 cm/sec. (double speed)
Rewind time	120 sec. (C-60)
Fast forward time	120 sec. (C-60)
Recording system	AC bias
Erase system	AC erase
Motor	DC servomotor x 2
Heads	Playback head x 1 (deck 1) Record/playback/erasure head x 1 (deck 2)
Dimensions (W×H×D)	360 x 128 x 309.5 mm (14¼ x 5⅛ x 12¼ in.)
Weight	3.0 kg (6.6 lb.)

GRAPHIC EQUALIZER GE-Z7000

Input	210 mV (47 kohms)
Output	210 mV (47 kohms)
Dimensions (W×H×D)	360 x 88 x 308 mm (14¼ x 3½ x 12¼ in.)
Weight	2.2 kg (4.84 lb.)

SPEAKER SX-Z7000

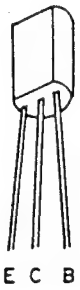
Cabinet type	3 way, bass reflex
Speaker	220 mm cone type woofer 60 mm cone type tweeter 30 mm ceramic type super tweeter
Impedance	6 ohms
Music power	80W
Output sound pressure level	90 dB/W/m
Dimensions (W×H×D)	H, HE, HR: 270 x 530 x 230 mm (10¾ x 20⅞ x 9⅛ in.) E, K, Z: 266 x 530 x 230 mm (10½ x 20⅞ x 9⅛ in.)
Weight	7.3 kg (16.06 lb.)

COMMON SECTION

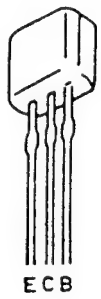
Power requirements	H, HE, HR: 120/220/240 V AC selectable, 50/60 Hz E, Z: 230 V AC, 50 Hz K: 240 V AC, 50 Hz
Dimensions (W×H×D)	952 x 520 x 332.5 mm (37½ x 20½ x 13⅛ in.) (vertical placement) 1,312 x 520 x 332.5 mm (51¾ x 20½ x 13⅛ in.) (horizontal placement)
Weight	H, HE: 29.5 kg (64.9 lb.) HR: 30.6 kg (67.32 lb.) E, K, Z: 31.2 kg (68.64 lb.)

Design and specifications are subject to change without notice.

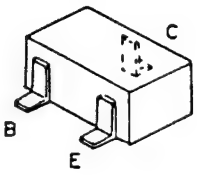
TRANSISTOR ILLUSTRATION (MX−Z7000M, FX−WZ7000, TX−Z7000, GE−Z7000)



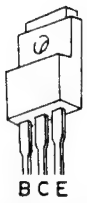
2SA1296
2SA1318
2SA952
2SC1815
2SC2001
2SC3266
2SC3331
2SD655
2SA1048
2SC2458
2SC3328
2SA1015
2SD1302



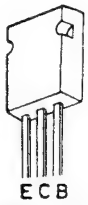
2SA933
2SC1740
DTA144ES
DTA114YS
DTC114YS
DTC144ES
2SD2144
DTC144TS
DTC144ES
DTA144ES



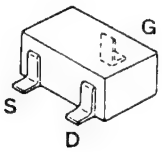
2SA1362
2SC1623
2SC2714
2SC3326
2SC2712
DTA114YK
DTA114EK
DTC143TK
DTC144EK
DTA123JK
DTC144WK
DTA144EK



2SB1370



2SB1354
2SB1332R



2SK209
2SK211
2SK302
2SK368

■ ACCESSORIES/PACKAGE LIST

DESCRIPTIONで判断できない物は "REFERENCE NAME LIST" を参照してください。
If can't understand for Description please kindly refer to "REFERENCE NAME LIST".

REF. NO	PART NO.	ｶﾝﾘ NO.	DESCRIPTION
1	82-VP1-902-010		IB, E(G)〈EE〉
2	82-VP1-904-010		IB, E(S)〈E, Z〉
3	82-VP1-901-010		IB, H(G)〈EE, K〉
4	82-VP1-903-210		IB, H(S)〈H, HE, HR, E, Z〉
5	87-006-226-010		AM LOOP ANT CON2〈EE, K, E〉
6	87-006-225-010		AM LOOP ANT NC2〈H, HE, HR, Z〉
7	81-748-632-010		FEEDER ANT FMN〈EXCEPT Z〉
8	87-043-106-010		FM, WIRE ANT 〈Z〉〈Z〉
9	87-009-724-010		PLUG, ADPTR, IR39〈H〉
10	87-042-062-010		PLUG, ADPTR S-16115〈HE, HR〉
11	82-VP1-644-010		RC, RC-TZ7000MF〈H, HE, HR〉
12	82-VP1-647-010		RC, RC-TZ7000ML〈EE, K, E, Z〉

MODEL NO.

MX – Z7000M

ELECTRICAL MAIN PARTS LIST (MX – Z7000M)

DESCRIPTIONで判断できない物は "REFERENCE NAME LIST" を参照してください。
If can't understand for Description please kindly refer to "REFERENCE NAME LIST".

REF. NO	PART NO.	ｶﾝﾘ NO.	DESCRIPTION
IC			
	87-017-016-010		IC, LM3875
	82-VP1-634-010		IC, CXP82324-127Q
	87-017-311-010		IC, M65831FP
	87-001-134-010		IC, NJU4053BD
	87-002-637-010		IC, BU4051B
	87-002-247-010		IC, BU4052B
	87-002-727-010		IC, NJM4558L
	87-002-218-010		IC, XRC5451AP
	87-001-476-010		IC, TC9154AP
	87-002-278-010		IC, LA2730
	87-020-908-010		IC, NJU4066BD
	87-002-444-010		IC, BU4094B
	87-001-396-010		IC, STK4182-MK2
	87-017-019-010		IC, CXP81312-333Q
	87-017-022-080		IC, NJM2068M-D(T1)
	87-002-214-010		IC, CS5339-KP
	87-017-018-010		IC, CXD2701Q
	87-017-291-010		IC, TMS44C256-10N
	87-002-279-010		IC, SM 5840 ES
	87-017-446-080		IC, PCM69AU
	87-002-412-080		IC, SN74HC00NS
	87-002-409-080		IC, SN74HC74NS
	87-020-881-080		IC, NJM78L05A
	87-020-882-080		IC, NJM79L05
	87-001-536-010		IC, NJM. 78M05FA
TRANSISTOR			
	87-026-462-080		TR, 2SC1740S (RS)
	89-320-011-080		TR, 2SC2001K
	87-026-464-080		TR, DTC114TS
	87-026-245-080		TR, DTC114ES
	89-113-187-880		TR, 2SA1318TU
	87-026-214-080		TR, DTA114YS
	87-026-215-080		TR, DTC114YS
	89-213-702-010		TR, 2SB1370E
	87-026-463-080		TR, 2SA933S (RS)
	89-318-155-080		TR, 2SC1815GR
	89-213-321-080		TR, 2SB1332R (T105)
	89-332-665-080		TR, 2SC3266GR
	87-026-500-080		TR, 2SD2144S, UV (TP)
	89-333-317-880		TR, 2SC3331 TU
	89-406-555-080		TR, 2SD655E
	87-026-219-080		TR, DTA144ES
	87-026-211-080		C-TR, DTA144EK T147
	87-026-238-080		C-TR, DTC144WK
	89-109-521-080		TR, 2SA952K
DIODE			
	87-002-225-010		DIODE, DBF 40C-K10
	87-002-597-060		DIODE, DBF, 60C-K13
	87-001-912-080		ZENER, UTZJ 5.1B
	87-020-691-080		DIODE, 1SS132 T-72
	87-001-574-080		DIODE, 1SR139-200 T31
	87-002-743-080		ZENER, MTZJ 33B
	87-001-913-080		ZENER, UTZJ5.6B
	87-001-911-080		ZENER, UTZJ4.7A (TAPG)
	87-017-430-090		DIODE, RK14〈E, K, HR, Z〉
	87-017-415-090		DIODE, RL203〈H, HE〉
	87-001-916-080		ZENER, UTZJ10B
	87-001-559-080		DIODE, ISS 131 (T-72)
	87-002-430-080		ZENER, UTZJ8.2C
	87-027-606-080		ZENER, HZ7C2L
	87-020-339-080		C-DIODE, 1SS226〈EXCEPT Z〉
	87-017-024-080		C-DIODE, DA204K〈Z〉
MAIN C.B			
C1	87-018-208-080		CAP, TC-U 0.047-50 F
C2	87-018-208-080		CAP, TC-U 0.047-50 F
C3	87-018-208-080		CAP, TC-U 0.047-50 F
C4	87-018-208-080		CAP, TC-U 0.047-50 F
C5	87-016-055-090		CAP, E 3300-42 HI-R
C6	87-016-055-090		CAP, E 3300-42 HI-R
C7	87-016-160-090		CAP, E 5600-56 BSN
C8	87-016-160-090		CAP, E 5600-56 BSN
C15	87-010-260-080		CAP, E 47-25 SME
C16	87-010-384-080		CAP, E 100-25 SME
C17	87-010-764-080		CAP, E 47-63V
C18	87-010-263-080		CAP, E 100-10
C27	87-010-405-080		CAP, E 10-50 SME
C28	87-010-101-080		CAP, E 220-16 SME
C60	87-010-403-080		CAP, E 3.3-50 SME
C61	87-010-374-080		CAP, E 47-10
C70	87-010-453-090		CAP, E 4700-25V SME
C71	87-010-405-080		CAP, E 10-50 SME
C72	87-010-260-080		CAP, E 47-25 SME
C73	87-010-101-080		CAP, E 220-16 SME
C74	87-010-381-080		CAP, E 330-16 SME
C75	87-016-293-010		CAP, E 220-50 BP
C77	87-018-208-080		CAP, TC-U 0.047-50 F
C78	87-018-208-080		CAP, TC-U 0.047-50 F
C79	87-018-127-080		CAP, TC-U 470P-50 B
C101	87-010-404-080		CAP, E 4.7-50 SME
C102	87-010-404-080		CAP, E 4.7-50 SME
C103	87-010-406-080		CAP, E 22-50 SME
C104	87-010-374-080		CAP, E 47-10
C105	87-010-263-080		CAP, E 100-10
C106	87-010-221-080		CAP, E 470-10
C141	87-010-406-080		CAP, E 22-50 SME
C191	87-010-405-080		CAP, E 10-50 SME
C192	87-010-405-080		CAP, E 10-50 SME
C193	87-010-405-080		CAP, E 10-50 SME
C194	87-010-405-080		CAP, E 10-50 SME
C198	87-010-405-080		CAP, E 10-50 SME
C199	87-010-405-080		CAP, E 10-50 SME
C200	87-010-405-080		CAP, E 10-50 SME
C201	87-018-134-080		CAP, TC-U 0.01-16 Y
C202	87-018-134-080		CAP, TC-U 0.01-16 Y
C250	87-010-401-080		CAP, E 1-50 SME
C251	87-010-101-080		CAP, E 220-16 SME
C252	87-010-401-080		CAP, E 1-50 SME
C253	87-010-401-080		CAP, E 1-50 SME
C254	87-010-405-080		CAP, E 10-50 SME
C255	87-010-405-080		CAP, E 10-50 SME
C256	87-010-401-080		CAP, E 1-50 SME
C257	87-010-401-080		CAP, E 1-50 SME
C258	87-010-404-080		CAP, E 4.7-50 SME
C259	87-010-404-080		CAP, E 4.7-50 SME
C260	87-010-400-080		CAP, E 0.47-50 SME
C261	87-010-400-080		CAP, E 0.47-50 SME
C262	87-010-404-080		CAP, E 4.7-50 SME
C263	87-010-404-080		CAP, E 4.7-50 SME
C264	87-010-401-080		CAP, E 1-50 SME
C265	87-010-405-080		CAP, E 10-50 SME
C266	87-010-404-080		CAP, E 4.7-50 SME
C267	87-010-404-080		CAP, E 4.7-50 SME
C269	87-018-121-080		CAP, TC-U 150P-50 B

REF. NO	PART NO.	カンリ NO.	DESCRIPTION
C270	87-018-121-080		CAP, TC-U 150P-50 B
C273	87-018-134-080		CAP, TC-U 0.01-16 Y
C274	87-018-134-080		CAP, TC-U 0.01-16 Y
C275	87-018-198-080		CAP, TC-U 2700P-16 X
C276	87-018-198-080		CAP, TC-U 2700P-16 X
C277	87-018-122-080		CAP, TC-U 180P-50 B
C278	87-018-122-080		CAP, TC-U 180P-50 B
C281	87-010-544-080		CAP, E 0.1-50
C282	87-010-544-080		CAP, E 0.1-50
C283	87-010-545-080		CAP, E 0.22-50 SME
C284	87-010-545-080		CAP, E 0.22-50 SME
C285	87-010-401-080		CAP, E 1-50 SME〈HE, HR〉
C285	87-010-403-080		CAP, E 3.3-50 SME〈H, E, K, Z〉
C286	87-010-405-080		CAP, E 10-50 SME
C287	87-010-405-080		CAP, E 10-50 SME
C288	87-010-405-080		CAP, E 10-50 SME
C289	87-010-401-080		CAP, E 1-50 SME
C290	87-010-401-080		CAP, E 1-50 SME〈HE, HR〉
C290	87-010-403-080		CAP, E 3.3-50 SME〈H, E, K, Z〉
C291	87-018-195-080		CAP, TC-U 1200P-16 X
C292	87-018-195-080		CAP, TC-U 1200P-16 X
C293	87-018-128-080		CAP, TC-U 560P-50 B
C294	87-018-128-080		CAP, TC-U 560P-50 B
C360	87-010-404-080		CAP, E 4.7-50 SME
C365	87-018-115-080		CAP, TC-U 47P-50 SL
C670	87-010-405-080		CAP, E 10-50 SME
C671	87-010-400-080		CAP, E 0.47-50 SME
C681	87-016-072-080		CAP, E 0.47-50 FX
C682	87-016-072-080		CAP, E 0.47-50 FX
C683	87-010-401-080		CAP, E 1-50 SME
C684	87-010-401-080		CAP, E 1-50 SME
C685	87-010-400-080		CAP, E 0.47-50 SME
C686	87-010-400-080		CAP, E 0.47-50 SME
C687	87-010-401-080		CAP, E 1-50 SME
C688	87-010-401-080		CAP, E 1-50 SME
C689	87-016-096-080		CAP, E 47-16 FX
C690	87-016-096-080		CAP, E 47-16 FX
C691	87-010-401-080		CAP, E 1-50 SME
C692	87-010-401-080		CAP, E 1-50 SME
C693	87-010-402-080		CAP, E 2.2-50 SME
C694	87-010-402-080		CAP, E 2.2-50 SME
C695	87-010-400-080		CAP, E 0.47-50 SME
C696	87-010-401-080		CAP, E 1-50 SME
C697	87-010-403-080		CAP, E 3.3-50 SME
C698	87-010-403-080		CAP, E 3.3-50 SME
C699	87-010-544-080		CAP, E 0.1-50
C701	87-010-405-080		CAP, E 10-50 SME
C702	87-010-405-080		CAP, E 10-50 SME
C703	87-018-128-080		CAP, TC-U 560P-50 B
C704	87-018-128-080		CAP, TC-U 560P-50 B
C750	87-010-405-080		CAP, E 10-50 SME
C751	87-010-374-080		CAP, E 47-10
C752	87-018-131-080		CAP, TC-U 1000P-50 B
C756	87-018-214-080		CAP, TC U 0.1-50 F
C757	87-018-214-080		CAP, TC U 0.1-50 F
C758	87-010-408-080		CAP, E 47-50 SME
C759	87-010-374-080		CAP, E 47-10
C760	87-010-374-080		CAP, E 47-10
C761	87-018-111-080		CAP, TC-U 27P-50 SL
C762	87-018-111-080		CAP, TC-U 27P-50 SL
C763	87-010-260-080		CAP, E 47-25 SME
C764	87-010-260-080		CAP, E 47-25 SME
C769	87-016-055-090		CAP, E 3300-42 HI-R〈Z〉
C770	87-016-055-090		CAP, E 3300-42 HI-R〈Z〉
C771	87-018-134-080		CAP, TC-U 0.01-16 Y
C772	87-018-134-080		CAP, TC-U 0.01-16 Y
C773	87-018-214-080		CAP, TC U 0.1-50 F
C773	87-016-055-090		CAP, E 3300-42 HI-R〈Z〉
C800	87-018-134-080		CAP, TC-U 0.01-16 Y
EMI101	87-008-372-080		FILTER, EMI BL OIRNI
EMI102	87-008-372-080		FLTR, EMI BL OIRNI〈E, K, Z〉
J280	87-099-084-010		JACK, 6.3 W/S
J281	87-099-064-010		JACK, 6.3 W/S
J283	87-099-064-010		JACK, 6.3 W/S
J750	81-VP1-634-010		JACK, PIN 3P
J751	81-VP1-634-010		JACK, PIN 3P
J752	81-VP1-634-010		JACK, PIN 3P
J753	87-009-393-010		JACK, PIN 2P EARTH
J755	87-009-877-010		CONN, 9P FG
J759	87-009-393-010		JACK, PIN 2P EARTH
J760	87-033-225-010		TERMINAL, SP-4P N
L750	87-005-366-010		COIL, 1UH
L751	87-005-366-010		COIL, 1UH
L752	87-005-366-010		COIL, 1UH
R25	87-025-475-080		RES NF 22-1/4WJ〈E, K, HR, Z〉
R27	87-025-475-080		RES NF 22-1/4WJ〈E, K, HR, Z〉
R40	87-022-050-080		RES METAL 1W-0.22J
R45	87-022-050-080		RES METAL 1W-0.22J
R49	87-022-050-080		RES METAL 1W-0.22J
R96	87-022-200-080		RES METAL 0.56-1W〈H, HE〉
R97	87-022-200-080		RES METAL 0.56-1W〈H, HE〉
R777	87-022-050-080		RES METAL 1W-0.22J
R778	87-022-050-080		RES METAL 1W-0.22J
R779	87-022-050-080		RES METAL 1W-0.22J
R780	87-022-050-080		RES METAL 1W-0.22J
RY1	87-045-335-010		RELAY, G5Z-2A 12VDC〈EXCEPT Z〉
RY1	87-045-285-010		RELAY, VB12MB
RY2	87-045-285-010		RELAY, VB12MB
RY3	87-045-344-010		RELAY, G5B-1 12V
VR141	81-MT3-631-010		VR, 50KBX2
VR281	81-VP1-622-010		VR, 10KA RK11K112
VR372	81-VP1-627-010		VR, 100KW RK11K112
VR373	81-VP1-627-010		VR, 100KW RK11K112
W1	82-VP2-634-110		F-CABLE 5P-2.5
W2	82-VP2-634-110		F-CABLE 5P-2.5

FRONT C.B

C1	87-010-401-080		CAP, E 1-50 SME
C2	87-010-401-080		CAP, E 1-50 SME
C3	87-010-405-080		CAP, E 10-50 SME
C4	87-016-088-040		CAP, E 220-6.3 SR
C5	87-010-263-080		CAP, E 100-10
C15	87-018-209-080		CAP, TC-U 0.1-50 F
C16	87-018-134-080		CAP, TC-U 0.01-16 Y
C19	87-018-131-080		CAP, TC-U 1000P-50 B
C20	87-010-401-080		CAP, E 1-50 SME
C21	87-010-401-080		CAP, E 1-50 SME
C22	87-010-401-080		CAP, E 1-50 SME
C23	87-010-404-080		CAP, E 4.7-50 SME
C24	87-010-404-080		CAP, E 4.7-50 SME
C160	87-018-209-080		CAP, TC-U 0.1-50 F
C161	87-010-401-080		CAP, E 1-50 SME
C162	87-010-260-080		CAP, E 47-25 SME
C163	87-010-263-080		CAP, E 100-10
C164	87-018-201-080		CAP, TC-U 5600P-16 X〈HE, HR〉
C165	87-018-201-080		CAP, TC-U 5600P-16 X〈HE, HR〉
C166	87-018-131-080		CAP, TC-U 1000P-50 B
C167	87-018-131-080		CAP, TC-U 1000P-50 B
C172	87-018-209-080		CAP, TC-U 0.1-50 F
C175	87-018-133-080		CAP, TC-U 4700P-16 X
FL1	82-VP1-631-010		FL, FIP11BYM7
L1	87-003-098-080		COIL, 2.2UH
L2	87-003-098-080		COIL, 2.2UH
L3	87-003-102-080		COIL, 10UH
L4	87-005-153-080		COIL, 47UH
S1	87-036-215-080		SW, TACT EVQ21404M
S2	87-036-215-080		SW, TACT EVQ21404M
S3	87-036-215-080		SW, TACT EVQ21404M
S4	87-036-215-080		SW, TACT EVQ21404M

REF. NO	PART NO.	カンリ NO.	DESCRIPTION
S5	87-036-215-080		SW, TACT EVQ21404M
S6	87-036-215-080		SW, TACT EVQ21404M
S7	87-036-215-080		SW, TACT EVQ21404M
S8	87-036-215-080		SW, TACT EVQ21404M
S9	87-036-215-080		SW, TACT EVQ21404M
S10	87-036-215-080		SW, TACT EVQ21404M
S11	87-036-215-080		SW, TACT EVQ21404M
S12	87-036-215-080		SW, TACT EVQ21404M
S13	87-036-215-080		SW, TACT EVQ21404M
S14	87-036-215-080		SW, TACT EVQ21404M
S15	87-036-215-080		SW, TACT EVQ21404M
S16	87-036-215-080		SW, TACT EVQ21404M
S17	87-036-215-080		SW, TACT EVQ21404M
S18	87-036-215-080		SW, TACT EVQ21404M
S20	87-036-215-080		SW, TACT EVQ21404M
S21	87-036-215-080		SW, TACT EVQ21404M
S22	87-036-215-080		SW, TACT EVQ21404M
S23	87-036-215-080		SW, TACT EVQ21404M
S24	87-036-215-080		SW, TACT EVQ21404M
S25	87-036-215-080		SW, TACT EVQ21404M
S26	87-036-215-080		SW, TACT EVQ21404M
S27	87-036-215-080		SW, TACT EVQ21404M
S28	87-036-215-080		SW, TACT EVQ21404M
S29	87-036-215-080		SW, TACT EVQ21404M
S30	87-036-215-080		SW, TACT EVQ21404M
VR2	82-VP2-636-010		VR, SL10K B〈HE, HR〉
X1	87-008-506-080		VIB, CER 10.0MHZ CST
X2	87-008-496-080		CERALOCK CST2.09MG〈HE, HR〉

DOLBY C.B

C50	87-010-404-080		CAP, E 4.7-50 SME
C51	87-010-404-080		CAP, E 4.7-50 SME
C52	87-010-260-080		CAP, E 47-25 SME
C53	87-010-260-080		CAP, E 47-25 SME
C55	87-018-111-080		CAP, TC-U 27P-50 SL
C57	87-010-405-080		CAP, E 10-50 SME
C58	87-018-127-080		CAP, TC-U 470P-50 B
C70	87-010-404-080		CAP, E 4.7-50 SME
C71	87-010-401-080		CAP, E 1-50 SME
C72	87-010-404-080		CAP, E 4.7-50 SME
C73	87-010-404-080		CAP, E 4.7-50 SME
C74	87-010-404-080		CAP, E 4.7-50 SME
C76	87-010-260-080		CAP, E 47-25 SME
C77	87-010-404-080		CAP, E 4.7-50 SME
C78	87-010-404-080		CAP, E 4.7-50 SME
C79	87-010-404-080		CAP, E 4.7-50 SME
C80	87-010-404-080		CAP, E 4.7-50 SME
C81	87-018-195-080		CAP, TC-U 1200P-16 X
C82	87-018-195-080		CAP, TC-U 1200P-16 X
C90	87-018-134-080		CAP, TC-U 0.01-16 Y
C91	87-018-134-080		CAP, TC-U 0.01-16 Y
C92	87-018-134-080		CAP, TC-U 0.01-16 Y
C93	87-018-134-080		CAP, TC-U 0.01-16 Y
C94	87-018-134-080		CAP, TC-U 0.01-16 Y
C95	87-018-134-080		CAP, TC-U 0.01-16 Y
C100	87-010-260-080		CAP, E 47-25 SME
C101	87-010-260-080		CAP, E 47-25 SME
C130	87-010-401-080		CAP, E 1-50 SME
C131	87-010-401-080		CAP, E 1-50 SME
C132	87-010-112-080		CAP, E 100-16
C133	87-010-406-080		CAP, E 22-50 SME
C134	87-010-101-080		CAP, E 220-16 SME
C135	87-010-546-080		CAP, E 0.33-50 SME
C136	87-018-203-080		CAP, TC-U 8200P-16 Y
C137	87-018-133-080		CAP, TC-U 4700P-16 X
R330	87-022-474-050		RES NF 10-1/4W J

DSP C.B

REF. NO	PART NO.	カンリ NO.	DESCRIPTION
C902	87-010-194-080		C-CAP, S 0.047-25 F
C903	87-012-349-080		C-CAP, S 1000P-50 CH
C904	87-012-349-080		C-CAP, S 1000P-50 CH
C905	87-010-234-080		CAP, E 47-16 5L
C906	87-010-234-080		CAP, E 47-16 5L
C907	87-012-349-080		C-CAP, S 1000P-50 CH
C908	87-012-349-080		C-CAP, S 1000P-50 CH
C911	87-016-264-080		C-CAP, TN4.7-6.3 F95Q
C912	87-010-805-080		C-CAP, S 1-16F
C913	87-010-263-080		CAP, E 100-10
C915	87-016-264-080		C-CAP, TN4.7-6.3 F95Q
C916	87-010-196-080		C-CAP, S 0.1-25 F
C917	87-010-196-080		C-CAP, S 0.1-25 F
C918	87-010-318-080		C-CAP, S 47P-50 CH
C919	87-010-196-080		C-CAP, S 0.1-25 F
C920	87-010-197-080		C-CAP, S 0.01-25 B
C921	87-010-075-080		CAP, E 10-16 5L
C922	87-010-075-080		CAP, E 10-16 5L
C923	87-010-293-080		C-CAP, 47P-50 CH
C924	87-010-293-080		C-CAP, 47P-50 CH
C925	87-010-196-080		C-CAP, S 0.1-25 F
C926	87-010-401-080		CAP, E 1-50 SME
C927	87-010-405-080		CAP, E 10-50 SME
C928	87-010-197-080		C-CAP, S 0.01-25 B
C929	87-010-196-080		C-CAP, S 0.1-25 F
C930	87-010-196-080		C-CAP, S 0.1-25 F
C931	87-010-405-080		CAP, E 10-50 SME
C933	87-010-166-080		C-CAP, S 100P-50 SL
C934	87-010-194-080		C-CAP, S 0.047-25 F
C936	87-010-197-080		C-CAP, S 0.01-25 B
C937	87-010-317-080		C-CAP, S 39P-50 CH
C938	87-010-317-080		C-CAP, S 39P-50 CH
C939	87-010-234-080		CAP, E 47-16 5L
C940	87-010-196-080		C-CAP, S 0.1-25 F
C941	87-010-318-080		C-CAP, S 47P-50 CH
C942	87-010-404-080		CAP, E 4.7-50 SME
C943	87-010-197-080		C-CAP, S 0.01-25 B
C944	87-010-194-080		C-CAP, S 0.047-25 F
C945	87-010-197-080		C-CAP, S 0.01-25 B
C946	87-010-404-080		CAP, E 4.7-50 SME
C947	87-010-197-080		C-CAP, S 0.01-25 B
C948	87-010-404-080		CAP, E 4.7-50 SME
C949	87-010-404-080		CAP, E 4.7-50 SME
C951	87-010-197-080		C-CAP, S 0.01-25 B
C952	87-015-819-080		CHIP CAP 0.01
C956	87-010-197-080		C-CAP, S 0.01-25 B
C960	87-010-194-080		C-CAP, S 0.047-25 F
C961	87-012-157-080		C-CAP, S 330P-50 CH
C966	87-010-805-080		C-CAP, S 1-16F
C967	87-010-405-080		CAP, E 10-50 SME
C970	87-010-263-080		CAP, E 100-10
C971	87-016-264-080		C-CAP, TN4.7-6.3 F95Q
C972	87-016-264-080		C-CAP, TN4.7-6.3 F95Q
C973	87-010-197-080		C-CAP, S 0.01-25 B
C974	87-010-401-080		CAP, E 1-50 SME
C975	87-010-197-080		C-CAP, S 0.01-25 B
C977	87-010-194-080		C-CAP, S 0.047-25 F
C979	87-010-263-080		CAP, E 100-10
C980	87-010-263-080		CAP, E 100-10
C981	87-010-263-080		CAP, E 100-10
C982	87-010-263-080		CAP, E 100-10
C985	87-010-260-080		CAP, E 47-25 SME
C987	87-010-307-080		C-CAP, 680P-50 CH
C988	87-018-129-080		CAP, TC-U 680P-50 B
C989	87-010-183-080		C-CAP, S 2700P-50 B
C990	87-010-183-080		C-CAP, S 2700P-50 B
C992	87-010-260-080		CAP, E 47-25 SME
C993	87-010-404-080		CAP, E 4.7-50 SME
C994	87-010-404-080		CAP, E 4.7-50 SME
C997	87-010-320-080		C-CAP, S 68P-50 CH

REF. NO	PART NO.	カンリ NO.	DESCRIPTION
C998	87-010-320-080		C-CAP, S 68P-50 CH
C999	87-010-320-080		C-CAP, S 68P-50 CH
FB1	87-005-521-080		C-COIL, BLM32A06
FB2	87-005-521-080		C-COIL, BLM32A06
FB3	87-008-372-080		FILTER, EMI BL 0IRNI
FB4	87-008-372-080		FILTER, EMI BL 0IRNI
FB5	87-008-372-080		FILTER, EMI BL 0IRNI
FB6	87-008-372-080		FILTER, EMI BL 0IRNI
FB7	87-005-521-080		C-COIL, BLM32A06
L901	87-005-153-080		COIL, 47UH
L903	87-005-153-080		COIL, 47UH
L904	87-005-153-080		COIL, 47UH
X901	87-030-310-080		VIB, XTAL 22.5792
X902	87-008-394-080		CF CST 4.19 MGW
VOLUME C.B			
C201	87-010-405-080		CAP, E 10-50 SME
C202	87-010-405-080		CAP, E 10-50 SME
C203	87-010-405-080		CAP, E 10-50 SME
C204	87-010-405-080		CAP, E 10-50 SME
C205	87-010-404-080		CAP, E 4.7-50 SME
C206	87-010-404-080		CAP, E 4.7-50 SME
C207	87-018-205-080		CAP, TC-U 0.022-25 F
VR1	82-VP1-633-010		VR, 50KBX4, 100KCX1 W/M
SUB C.B			
FG-GEQ C.B			
J758	87-009-877-410		CONN, 9P FG (BLU)
PT2	82-VP1-630-010		PT, 2VP-1 FL

REF. NO	PART NO.	カンリ NO.	DESCRIPTION
IC C.B			
TR C.B			
AC 1 C.B			
⚠F2	87-035-436-010		FUSE, 2.5A 125VARLEAD〈H, HE〉
⚠F2	87-035-366-010		FUSE, 2.5A 250VTE/K〈E, K, HR, Z〉
R96	87-022-200-080		RES METAL 0.56-1W〈E, K, HR, Z〉
R97	87-022-200-080		RES METAL 0.56-1W〈E, K, HR, Z〉
AC 2 C.B			
⚠F1	87-035-191-010		FUSE, 3.15A〈H, HE, HR〉
⚠F1	87-035-367-010		FUSE, 3.15A 250V T E〈E, K, Z〉
AC VOLTAGE			
⚠SW1	87-036-173-010		SW, SL 2-2-4 SDKG〈H, HE〉
⚠SW1	87-036-173-010		SW, SL 2-2-4 SDKG〈HR〉
MISCELLANEOUS			
⚠	87-050-034-010		AC CORD ASSY, E〈HE, HR〉
⚠	87-050-016-010		AC CORD ASSY, E〈E, Z〉
⚠	87-050-029-010		AC CORD ASSY, K 3P〈K〉
⚠	87-034-749-010		AC CORD, H W/PLUG〈H〉
⚠	87-085-184-010		BUSHING, AC CORD D〈H〉
⚠	87-085-185-010		BUSHING, AC CORD E〈EXCEPT H〉
⚠PT1	82-VP1-624-010		PT, 2VP-1 E, K〈E, K, Z〉
⚠PT1	82-VP1-622-010		PT, 2VP-1 H〈H, HE〉
⚠PT1	82-VP1-625-010		PT, 2VP-1 HR〈HR〉

IC, SM5840ES

<table>
<tr><th>Pin No.</th><th>Pin Name</th><th>I/O</th><th>Description</th></tr>
<tr><td>1</td><td>WSL1</td><td>I</td><td>Input/output data word length select pin 1 (Connect to GND)
<table>
<tr><th colspan="2">Pin level</th><th>Noise shaper</th><th colspan="2">Onput/output word length</th></tr>
<tr><th>WSL1</th><th>WSL2</th><th></th><th>Input bit no.</th><th>Output bit no.</th></tr>
<tr><td>H</td><td>H</td><td>OFF</td><td>18bit</td><td>20bit</td></tr>
<tr><td>H</td><td>L</td><td>ON</td><td>18bit</td><td>18bit</td></tr>
<tr><td>L</td><td>H</td><td>ON</td><td>16bit</td><td>18bit</td></tr>
<tr><td>L</td><td>L</td><td>ON</td><td>16bit</td><td>16bit</td></tr>
</table></td></tr>
<tr><td>2</td><td>CKI</td><td>I</td><td>System clock input.</td></tr>
<tr><td>3</td><td>$\overline{CKSL}$</td><td>I</td><td>System clock input (H : 384fs, L : 256fs).(Conneted to VDD)</td></tr>
<tr><td>4</td><td>CKO</td><td>O</td><td>System clock output (the CKI clock is buffered and output).(unused)</td></tr>
<tr><td>5</td><td>VSS</td><td>–</td><td>GND.</td></tr>
<tr><td>6</td><td>NC</td><td>–</td><td>Not connected.</td></tr>
<tr><td>7</td><td>NC</td><td>–</td><td>Not connected.</td></tr>
<tr><td>8</td><td>WSL2</td><td>I</td><td>Input/output data word length select pin 2.(Conneted to VDD)</td></tr>
<tr><td>9</td><td>DSF1</td><td>I</td><td>Deemphasis select pin 1.
<table>
<tr><th colspan="2">Pin level</th><th colspan="2">Deemphasis</th></tr>
<tr><th>DSF1</th><th>DSF2</th><th>ON/OFF select</th><th>fs select</th></tr>
<tr><td>L</td><td>L</td><td>ON</td><td>44.1kHz</td></tr>
<tr><td>L</td><td>H</td><td>ON</td><td>48.0kHz</td></tr>
<tr><td>H</td><td>H</td><td>ON</td><td>32.0kHz</td></tr>
<tr><td>H</td><td>L</td><td>OFF</td><td>–</td></tr>
</table></td></tr>
<tr><td>10</td><td>DSF2</td><td>I</td><td>Deemphasis select pin 2.</td></tr>
<tr><td>11</td><td>$\overline{RST}$</td><td>I</td><td>System reset.</td></tr>
<tr><td>12</td><td>BCKO</td><td>O</td><td>Output bit clock.</td></tr>
<tr><td>13</td><td>DOR</td><td>O</td><td>Rch 8fs data output.</td></tr>
<tr><td>14</td><td>DOL</td><td>O</td><td>Lch 8fs data output.</td></tr>
<tr><td>15</td><td>WCKO</td><td>O</td><td>Output word clock.</td></tr>
<tr><td>16</td><td>VDD</td><td>–</td><td>Power pin.</td></tr>
<tr><td>17</td><td>NC</td><td>–</td><td>Not connected.</td></tr>
<tr><td>18</td><td>NC</td><td>–</td><td>Not connected.</td></tr>
<tr><td>19</td><td>NC</td><td>–</td><td>Not connected.</td></tr>
<tr><td>20</td><td>LRCI</td><td>I</td><td>Input data sample rate (fs) clock.</td></tr>
<tr><td>21</td><td>BCKI</td><td>I</td><td>Input bit clock.</td></tr>
<tr><td>22</td><td>DIN</td><td>I</td><td>Input data.</td></tr>
</table>

IC, CXD2701Q

Pin No.	Pin Name	I/O	Description
1	I-MODE	I	Input data format setting terminal. (Connected to VDD)
2	I-DIR	I	
3	I-DATA	I	1-sampling 2-channel serial data input terminal. Data formatted as 2's complement.
4	I-BCK	I	Serial data transmission clock input.
5	I-LRCK	I	Serial I/O sampling clock input. L channel data transmission when "H", R channel data transmission when "L".
6	VSS1	—	GND.
7	O-DATA	O	Serial data output. (2's complement)
8	O-BCK	O	Bit clock output. 64 slots.
9	O-LRK	O	Serial data sampling clock output.
10	BS1	I	Output data bit quantity setting terminal. (Connected to VDD)
11	BS2	I	Output data bit quantity setting terminal. (Connected to GND)
12	O-DIR	I	Output data format setting terminal. (Connected to VDD)
13	VSS3	—	GND.
14	SCK	O	System clock output. fsck = fxt = 512fs
15	XOUT	O	X'tal oscillation circuit output. (22.57MHz)
16	XIN	I	X'tal oscillation circuit input. fxt = 512fs (22.57MHz)
17	VDD1	—	Power supply. (+5V)
18	I/O4	I/O	Data input/output for external dynamic RAM.
19	I/O3	I/O	
20	CAS	O	Column address strobe output for external dynamic RAM.
21	I/O2	I/O	Data input/output for external dynamic RAM.
22	I/O1	I/O	
23	$\overline{WE}$	O	Write enable output for external dynamic RAM. "L" active.
24	A0	O	Address output for external dynamic RAM.
25	RAS	O	Row address strobe for external dynamic RAM.
26	A1	O	Address output for external dynamic RAM.
27	A2	O	
28	VSS2	—	GND.
29 ∫ 34	A3 ∫ A8	O	Address output for external dynamic RAM.
35	TEST1	I	Test terminal. (Connected to GND)
36	TEST2	I	
37	TEST3	I	
38	TEST0	O	Test terminal. (Not used)
39	VDD2	—	Power supply. (+5V)
40	PRGD	I	Serial data input to receive commands, coefficients and control signals from microcomputer.
41	PRGCK	I	Serial clock input for PRGD data. Data is latched at the starting edge of the clock.
42	PRGL	I	Input to latch serial data from microcomputer in IC. "L" active.
43	INIT	I	Initializing input. "L" active. Put in sync again at leading edge.
44	OVF	O	Not used.

IC, CXP82324-12

Pin No.	Pin Name	I/O	Description
1	I-$\overline{\text{HOLD}}$	I	HOLD input. "L": HOLD mode. "H": Normal mode.
2	I-REMOTE	I	Remote control input.
3	NC	—	Not used.
4	O-CE (M-EVR)	O	Not used.
5	NC	—	Not used.
6	O-CE (DSP)	O	Strobe output for DSP microcomputer.
7	O-CE (EVR)	O	Strobe output for electrical volume.
8	O-CLK (DSP, GEQ)	O	Clock output for DSP and GEQ.
9	I-DATA (GEQ)	I	Data input from GEQ microcomputer.
10	O-DATA (DSP, GEQ)	O	Data output for DSP and GEQ.
11	O-CLK (4094, etc)	O	Clock for shift register and electrical volume.
12	O-STB SR (4094)	O	Strobe output for shift register.
13	O-DATA (SR, EVR)	O	Data output for shift register and electrical volume.
14	O-CE (GEQ)	O	Strobe output for GEQ microcomputer.
15	I/O-$\overline{\text{SERIAL}}$	I/O	Serial data for system control.
16 ⟆ 19	NC	—	Not used.
20	I-INITIAL	I	Initialize input. (Not used)
21	O-VOL · LED	O	Volume LED control output. LED lights on when "H".
22	I-KEY1	I	A/D input for key input.
23	I-KEY2	I	
24	I-KEY3	I	Key input. (Power)
25	I-KEY4	I	A/D input for key input.
26	O-SP LEVEL	—	Not used.
27	NC	—	Not used.
28	I-MIC	I	Microphone input detection A/D port. Vocal fader switched on at an input of over 0.34V in auto vocal fader mode. Reset time: Fast;1 sec., Slow; 4 sec.
29	I-VOL	I	A/D input for volume position detection.
30	$\overline{\text{RESET}}$	I	Reset input.
31	EXTAL	—	X'tal terminal. (10.0MHz)
32	XTAL	—	
33	VSS	I	GND.
34 ⟆ 45	NC	—	Not used.
46 ⟆ 60	O-S14 ⟆ O-S0	O	FL display segment output.
61 ⟆ 70	O-G10 ⟆ O-G1	O	FL display grid output.
71	VFDP	—	FL display power supply. (−31.4V)

Pin No.	Pin Name	I/O	Description
72	VDD	—	Power supply. (+5V)
73	NC	—	Not used.
74	VOL UP	O	Volume control output. (UP)
75	VOL DOWN	O	Volume control output. (DOWN)
76	O-MUTE	O	Mute output. Muting when "H".
77	O-$\overline{\text{POWER}}$	O	Power control output. Power on when "L".
78	NC	—	Not used.
79	NC	—	
80	NC	—	

IC, CXP81312-333Q

Pin No.	Pin Name	I/O	Description
1 ⟆ 14	NC	O	Not used.
15	I-FADER	I	Connected to GND.
16	I-OVER	I	Not used.
17	I-FSO	I	Connected to GND.
18	I-FS1	I	Connected to GND.
19	O-CLK2701	O	Clock signal for CXD2701 control.
20	O-DATA2701	O	Serial data for CXD2701 control.
21	NC	O	Not used.
22	O-32K	O	Not used.
23	O-48K	O	Not used.
24	O-44.1K	O	Not used.
25	NC	O	Not used.
26	$\overline{\text{O-DAT}}$	O	Not used.
27	O-DIG A	O	Not used.
28	O-DIG B	O	Not used.
29	$\overline{\text{O-K MODE}}$	O	Not used.
30	O-STB2701	O	Strobe signal for CXD2701 control.
31	MP	O	Not used. (connected to GND)
32	$\overline{\text{RST}}$	I	Reset signal for microcomputer.
33	VSS	—	GND.
34	XTAL	I	X'tal terminal. (4.19MHz)
35	EXTAL	—	
36	$\overline{\text{CSO}}$	I	Connected to VDD.
37	SIO	I	Connected to VDD.
38	SOO	O	Not used.
39	$\overline{\text{SCKO}}$	O	Not used.
40	I-STB DSP	I	Strobe signal input from main microcomputer.
41	I-DATA DSP	I	Data input from main microcomputer.
42	VDD	I	Connected to VDD.

Pin No.	Pin Name	I/O	Description
43	I-CLK	I	Clock input from main microcomputer.
44	I-BAND	I	Connected to GND.
45 ⟆ 51		I	Connected to GND.
52	VSS	—	GND.
53	VREF	—	Connected to VDD.
54	VDD	—	Power supply. (+4.5V)
55 ⟆ 62	PG7 ⟆ PG0	I	Connected to VDD.
63 ⟆ 68		O	Not used.
69	PEI	I	Connected to VDD.
70	PEO	I	Connected to VDD.
71	$\overline{\text{NMI}}$	I	Connected to VDD.
72	VDD	—	Power supply. (+4.5V)
73	VSS	—	GND.
74 ⟆ 80		O	Not used.

IC, PCM69AU

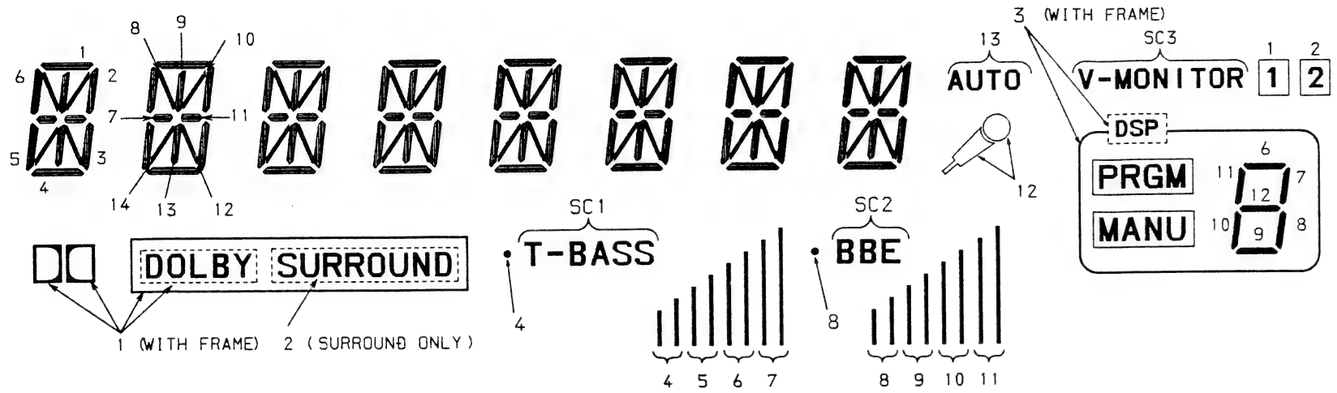
Pin No.	Pin Name	I/O	Description
1	+VCC	—	Power supply. (+5V)
2	V COM (L)	O	V common for L-channel.
3	NC	—	Not used.
4	I-OUT (L)	O	Current output for L-channel.
5	SERVO DC	—	Servo filter. Bypassed via capacitor to GND.
6	REF DC	—	Reference filter. Bypassed via capacitor to GND.
7	I-OUT (R)	O	Current output for R-channel.
8	NC	—	Not used.
9	V COM (R)	O	V common for R-channel.
10	A GND	—	Analog GND.
11	D GND	—	Digital GND.
12	TP2	I	Test terminal 2. (Connected to GND)
13	DATA (R)	I	Data input for R-channel.
14	BCK	I	Bit clock input.
15	SYS-CLK	I	System clock input.
16	WDCK	I	Word clock input.
17	DATA (L)	I	Data input for L-channel.
18	TP3	I	Test terminal 3. (Not used)
19	TP1	I	Test terminal 1. (Connected to VDD)
20	+VDD	—	Power supply. (+4.5V)

IC, TMS44C256-10N

Pin No.	Pin Name	I/O	Description
1	I/O1	I/O	Data input/output.
2	I/O2	I/O	
3	WE	—	Write enable output.
4	RAS	—	Row address strobe signal.
5	NC	—	Not used.
6 ʃ 9	A0 ʃ A3	I	Address input.
10	VDD	—	Power supply. (+5V)
11 ʃ 15	A4 ʃ A8	I	Address input.
16	OE	—	Output enable signal.
17	CAS	—	Column address strobe signal.
18	I/O3	I/O	Data input/output.
19	I/O4	I/O	
20	VSS	—	GND.

FL/IC BLOCK DIAGRAM—1 (MX—Z7000M)

FL, FIP11BYM7

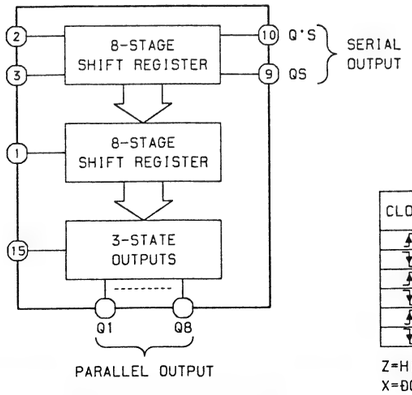


TERMINAL CONNECTION

TERMINAL NO. ELECTRODE	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
	F2	F2	NP	P 14	P 13	P 12	P 11	P 10	P 9	P 8	P 7	P 6	P 5	P 4	P 3	P 2	P 1	P SC3
TERMINAL NO. ELECTRODE				19 P SC2	20 P SC1	21 NP	22 NP	23 10G	24 9G	25 8G	26 7G	27 6G	28 5G	29 4G	30 3G	31 1G	32 2G	33 NP	34 F1	35 F1

NOTES F:FILAMENT NP:NO PIN
G:GRID
P:ANODE

IC, BU4094B



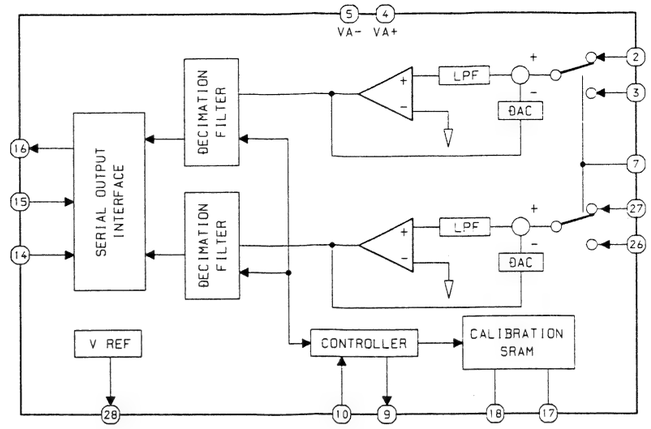
Q1:O.DOLBY ON Q5:O.PLAY
Q2:O.DOLBY C Q6:O.PB2
Q3:O.EXT.REC Q7:O.LED
Q4:O.INT.REC Q8:O.$\overline{RMT}$

TRUTH TABLE

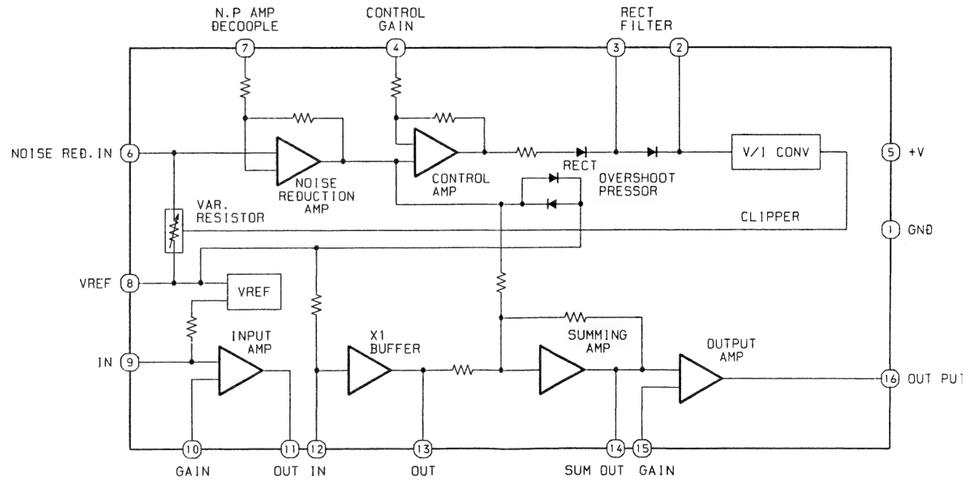
CLOCK	OUTPUT OUTPUT	STROBE	DATA	PARALLEL OUTPUTS Q1	PARALLEL OUTPUTS Q2	SERIAL OUTPUTS QS	SERIAL OUTPUTS QS
↓	L	X	X	Z	Z	Q7	NO CHG.
↑	L	X	X	Z	Z	NO CHG.	QS
↓	H	L	X	NO CHG.	NO CHG.	Q7	NO CHG.
↑	H	H	L	L	Qn−1	Q7	NO CHG.
↓	H	H	H	H	Qn−1	Q7	NO CHG.
↑	H	X	X	NO CHG.	NO CHG.	NO CHG.	QS

Z=HIGH IMPEDANCE
X=DON'T CARE

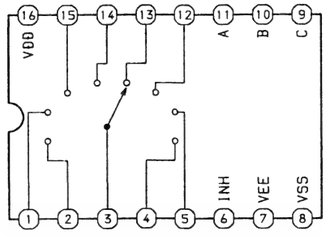
IC, CS5339—KP



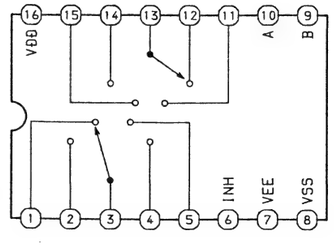
IC, LA2730



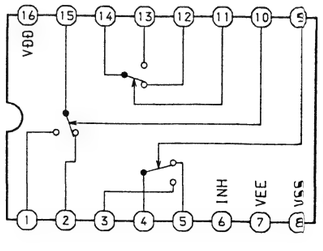
IC, BU4051B



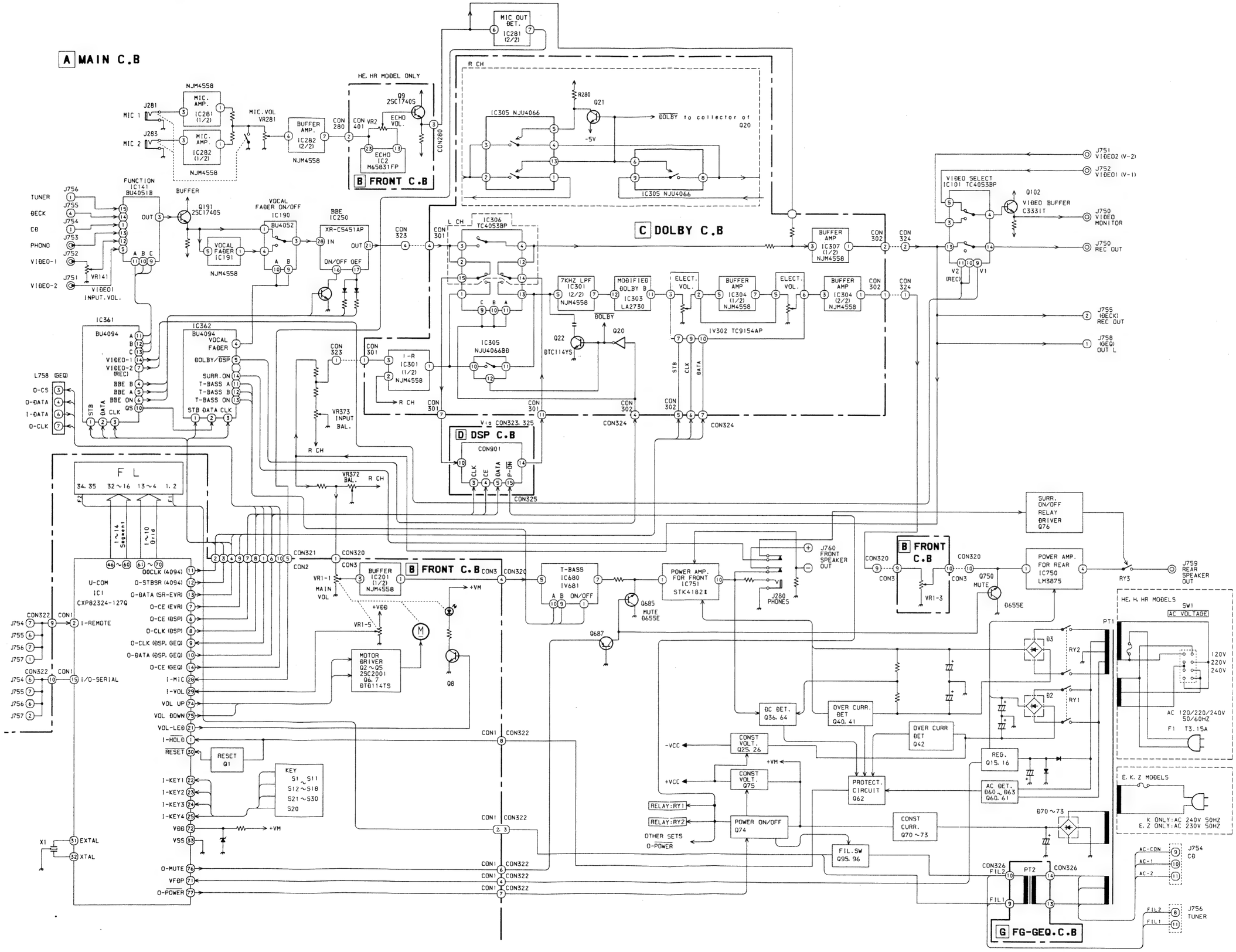
IC, BU4052B



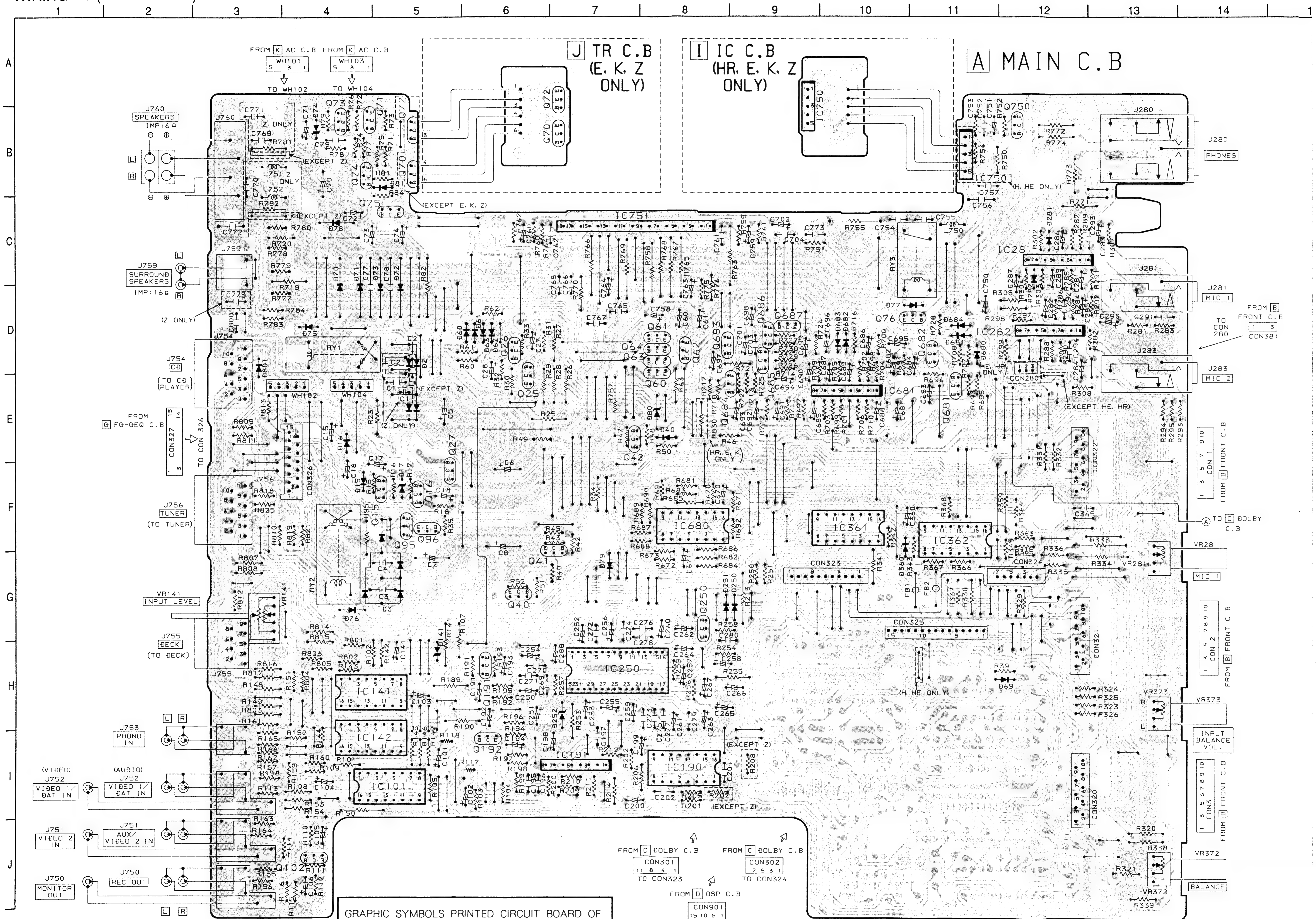
IC, NJU4053BD



BLOCK DIAGRAM—1 (MX—Z7000M)



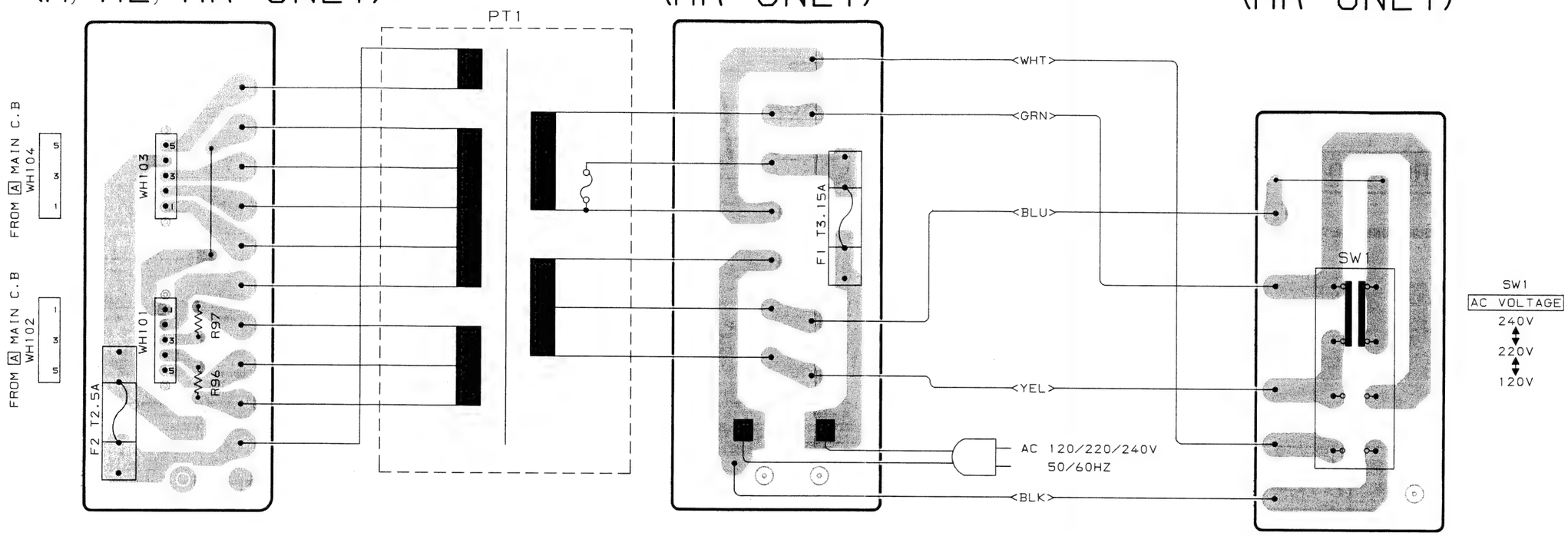
WIRING−1 (MX−Z7000M)



GRAPHIC SYMBOLS PRINTED CIRCUIT BOARD OF ELECT. CAP. ARE DESIGNED AS NEGATIVE POLE.

(プリント基板内のケミコンの極性表示は⊖表示です。)

K AC1 C.B (H, HE, HR ONLY)

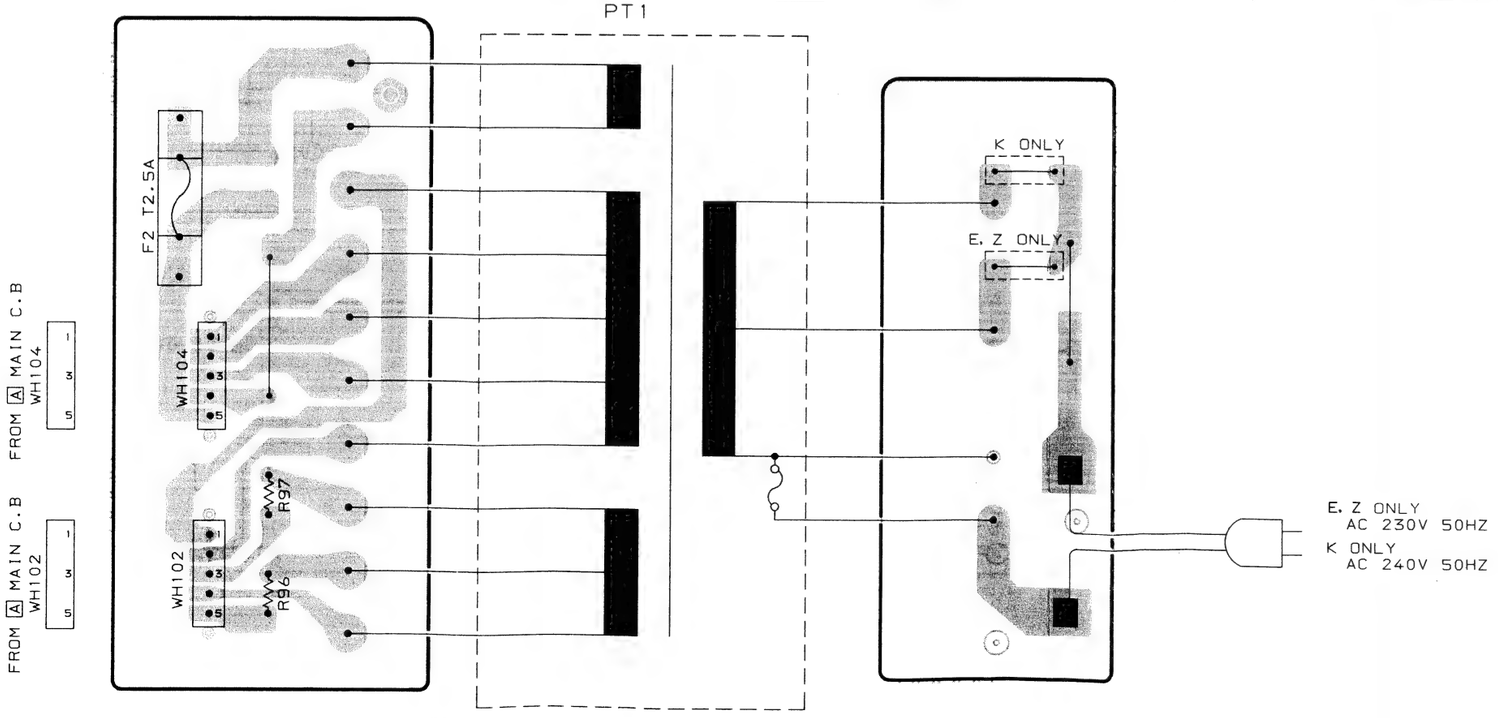


L AC2 C.B (HR ONLY)

M AC VOLTAGE C.B (HR ONLY)

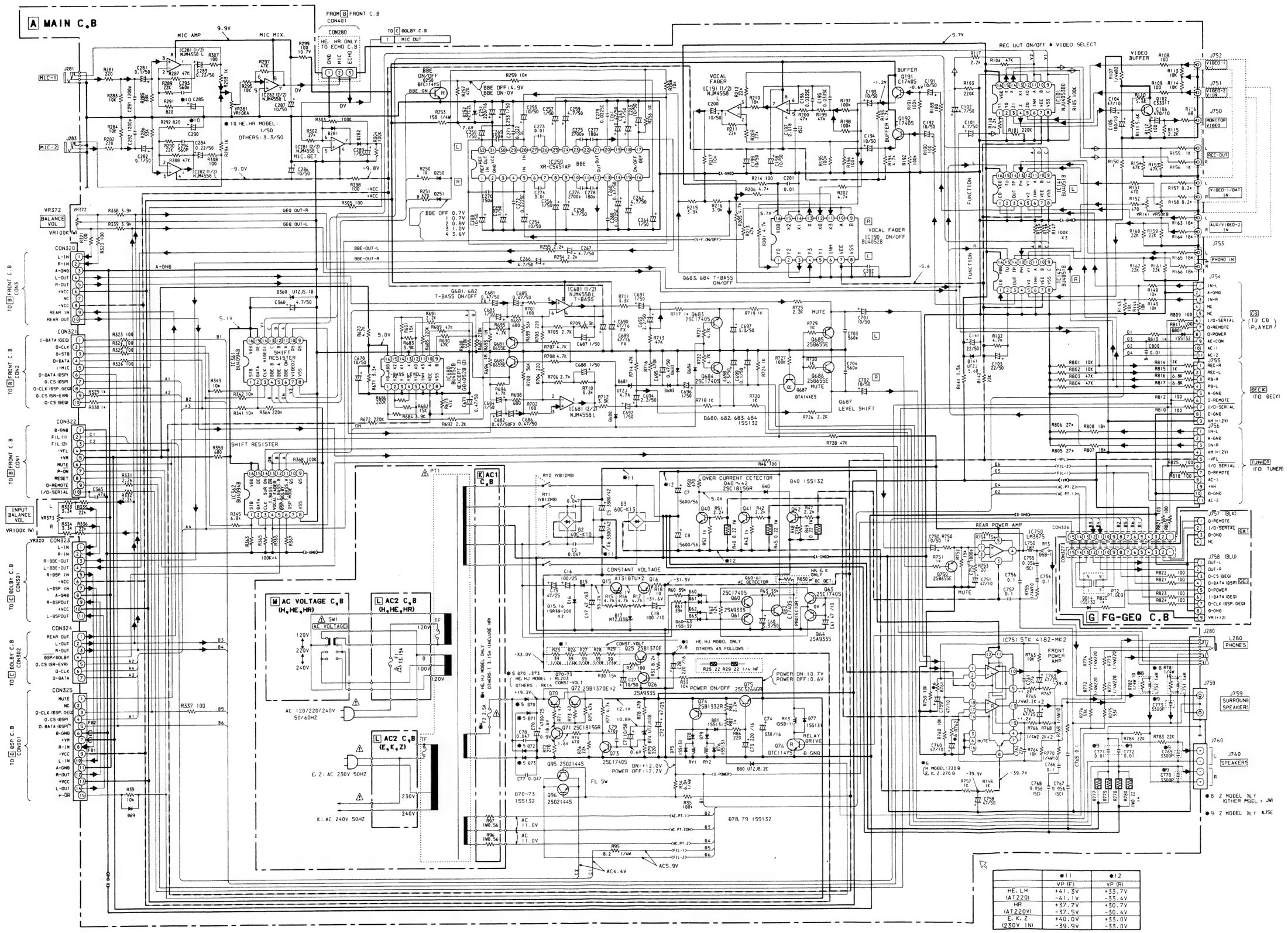
SW1
AC VOLTAGE
240V
220V
120V

K AC1 C.B (E, K, Z ONLY)



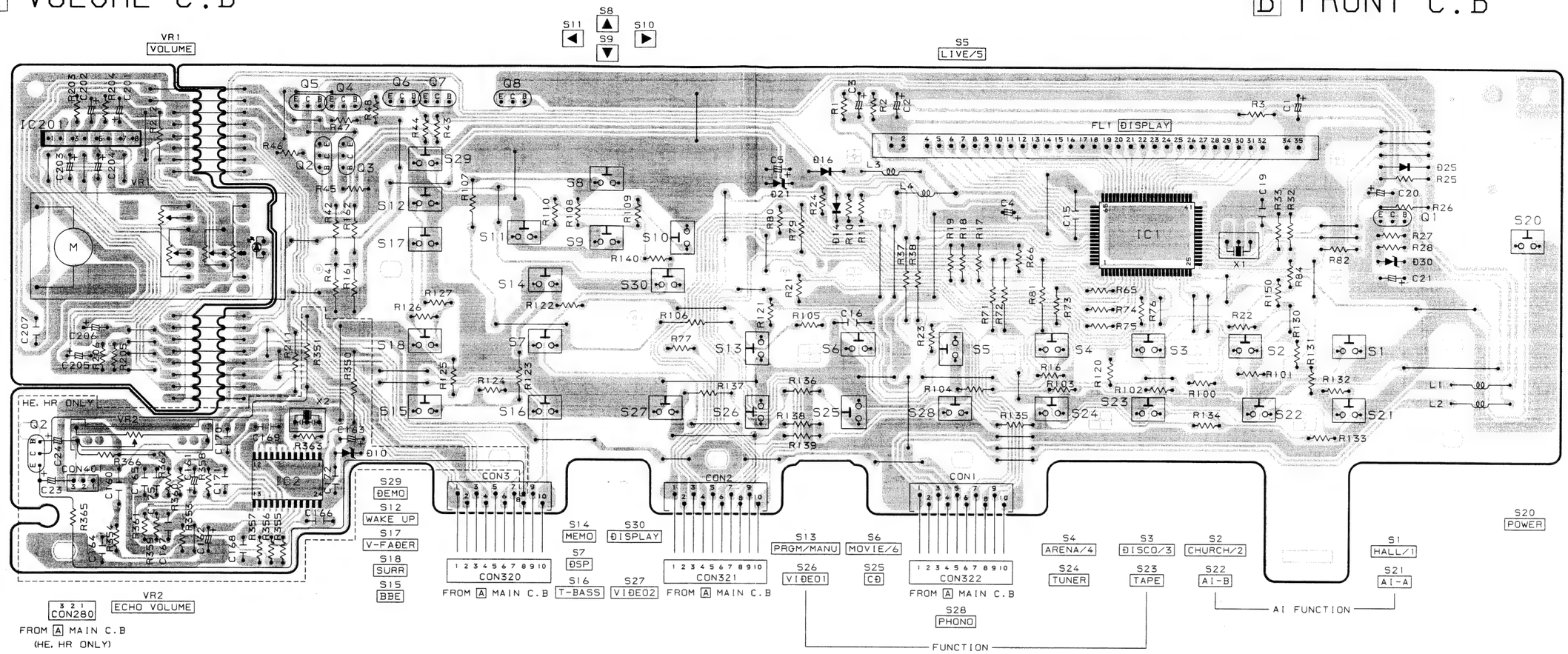
L AC2 C.B (E, K, Z ONLY)

SCHEMATIC DIAGRAM—1 (MX—Z7000M)



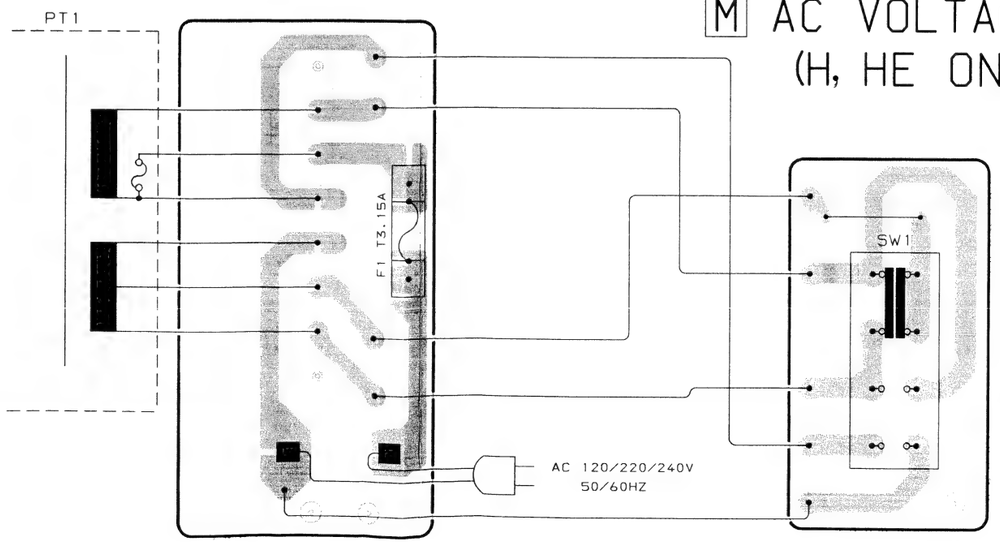
	*11	*12
	VP (F)	VP (R)
HE, LH (AT220)	+41.3V	+33.7V
	-41.1V	-33.4V
HR (AT220V)	+37.7V	+30.7V
	-37.5V	-30.4V
E, K, Z (230V IN)	+40.0V	+33.0V
	-39.9V	-33.0V

E VOLUME C.B



B FRONT C.B

L AC2 C.B (H, HE ONLY)

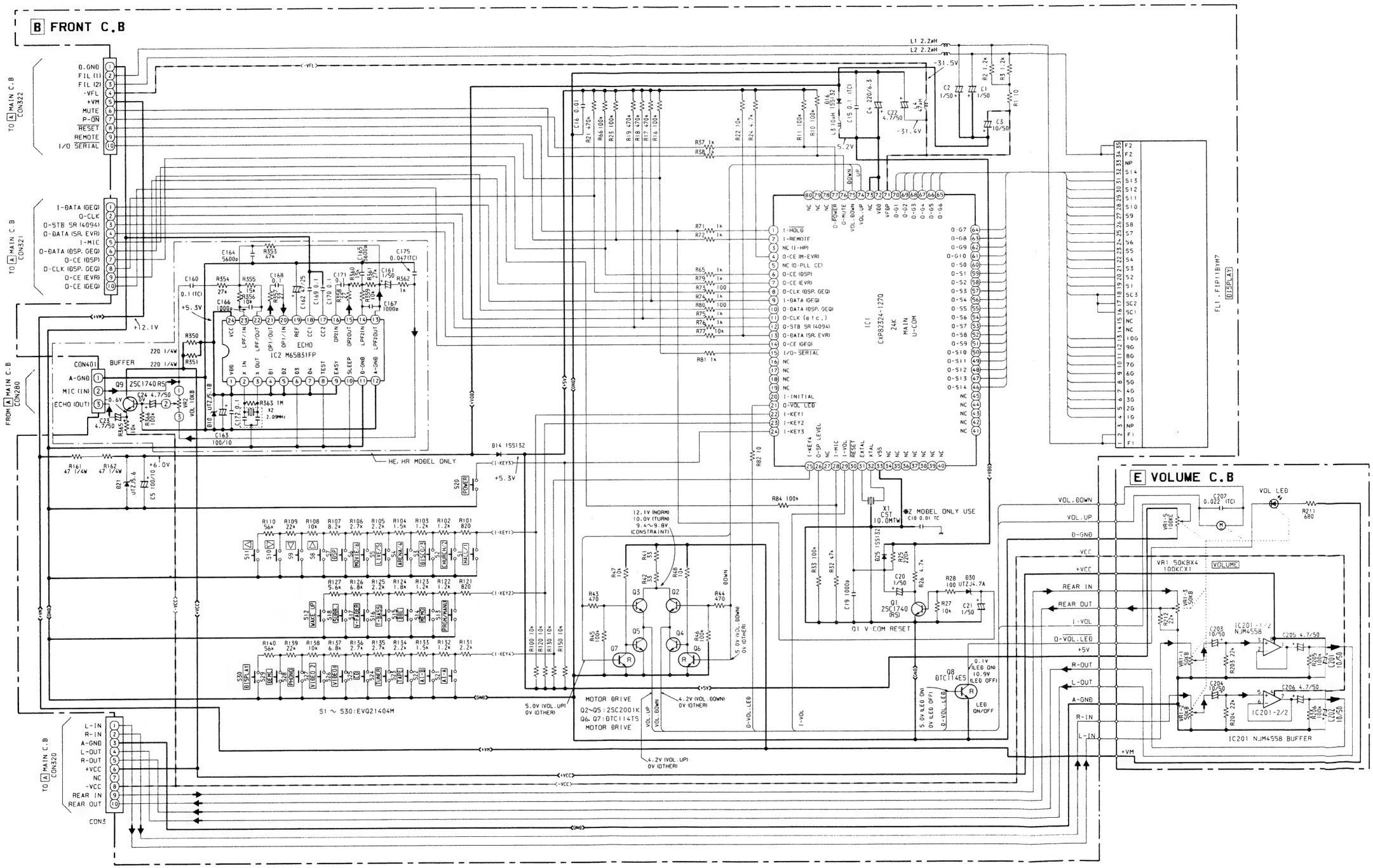


M AC VOLTAGE C.B (H, HE ONLY)

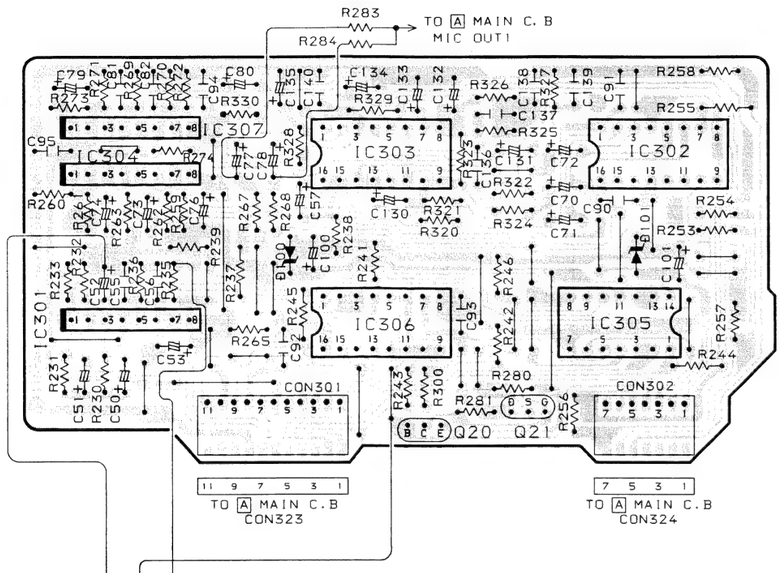
GRAPHIC SYMBOLS PRINTED CIRCUIT BOARD OF ELECT. CAP. ARE DESIGNED AS NEGATIVE POLE.

(プリント基板内のケミコンの極性表示はθ表示です。)

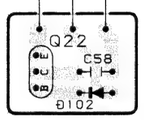
SCHEMATIC DIAGRAM—2 (MX—Z7000M)



C ÐOLBY C.B

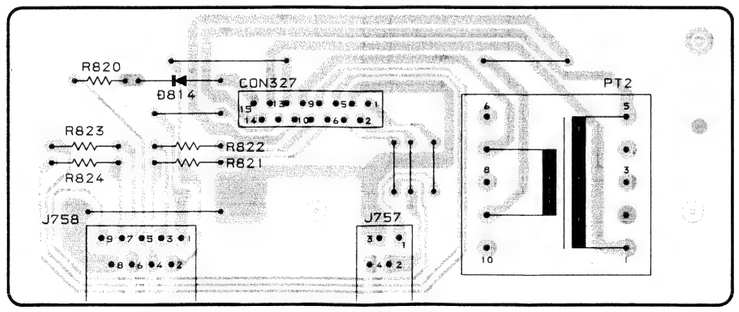


F SUB C.B



G FG-GEQ.C.B

FROM A MAIN C.B
CON326

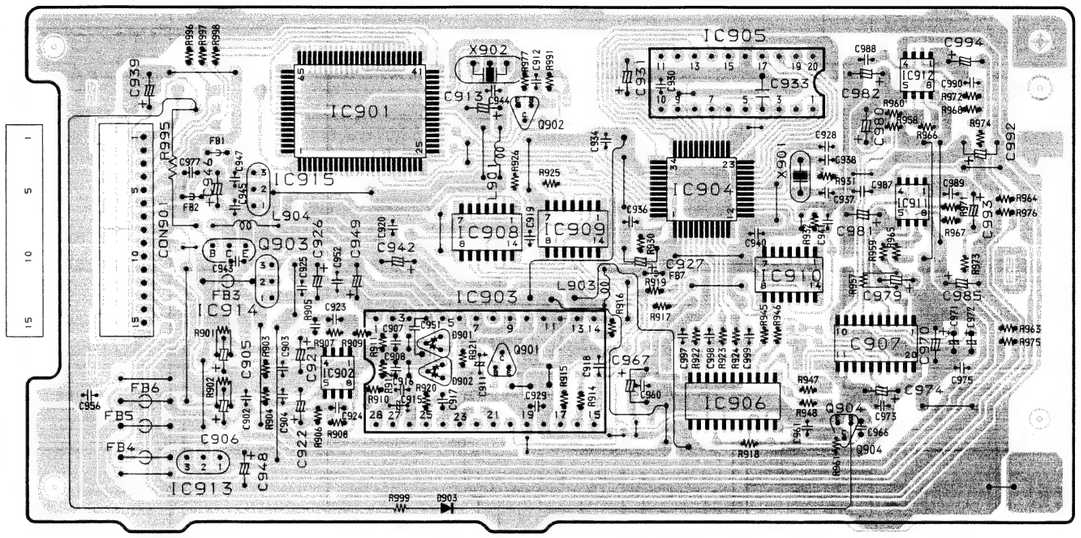


J758
GEQ.
(TO GEQ.)

J757
ÐAT CONTROL
(OPTICAL)
(TO ÐAT)

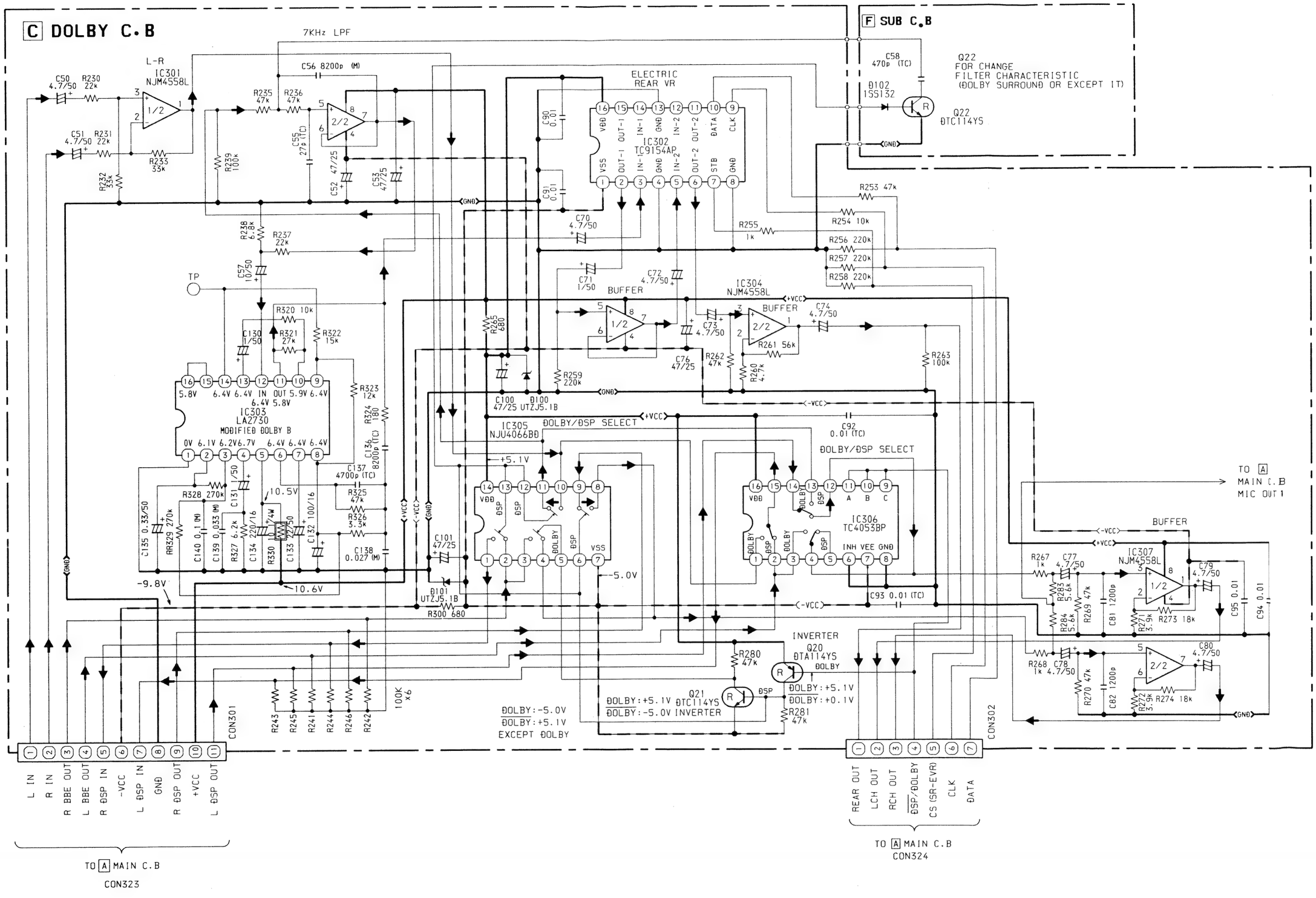
Ð ÐSP C.B

FROM A MAIN C.B
CON325

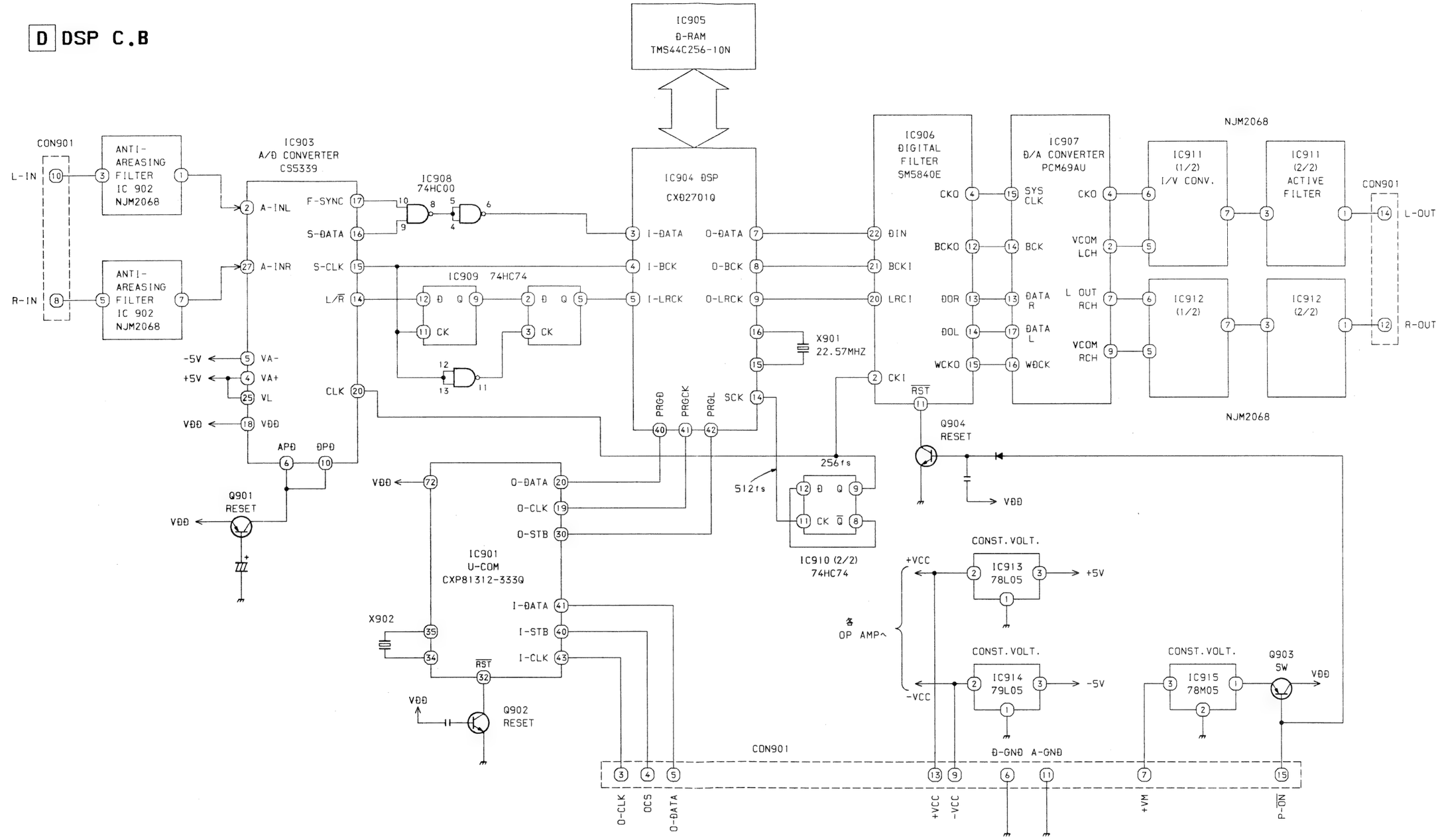


GRAPHIC SYMBOLS PRINTED CIRCUIT BOARD OF ELECT. CAP. ARE DESIGNED AS NEGATIVE POLE.

(プリント基板内のケミコンの極性表示はθ表示です。)


C DOLBY C.B
7KHz LPF
L-R
IC301 NJM4558L
C56 8200p (M)
C50 4.7/50
R230 22k
C51 4.7/50
R231 22k
R232 33k
R233 33k
R235 47k
R236 47k
C55 275p (TC)
C52 47/25
C53 47/25
R239 100k
C90 0.01
C91 0.01
ELECTRIC REAR VR
IC302 TC9154AP
VDD VSS OUT-1 OUT-1 IN-1 IN-1 GND GND IN-2 IN-2 OUT-2 OUT-2 DATA STB CLK GND
C70 4.7/50
R238 6.8k
R237 22k
C57 10/50
TP
C71 1/50
C72 4.7/50
BUFFER
IC304 NJM4558L
+VCC
C73 4.7/50
C74 4.7/50
R261 56k
R262 47k
R260 4.7k
R263 100k
R253 47k
R254 10k
R255 1k
R256 220k
R257 220k
R258 220k
R265 680
R259 220k
C76 47/25
R320 10k
C130 1/50
R321 27k
R322 15k
R323 12k
R324 180
C136 8200p (TC)
C137 4700p (TC)
R325 47k
R326 3.3k
C138 0.027 (M)
C135 0.33/50
RR329 270k
C140 0.1 (M)
C139 0.033 (M)
R327 6.2k
C134 220/16
R328 270k
C131 1/50
R330 1/4W
C133 22/50
C132 100/16
IC303 LA2730
MODIFIED DOLBY B
5.8V 6.4V 6.4V IN OUT 5.9V 6.4V 6.4V 5.8V
0V 6.1V 6.2V 6.7V 6.4V 6.4V 6.4V
10.5V
10.6V
-9.8V
C100 47/25 UTZJ5.1B
D100
C101 47/25
D101 UTZJ5.1B
R300 680
IC305 NJU4066BD
DOLBY/DSP SELECT
+5.1V
-5.0V
IC306 TC4053BP
INH VEE GND
A B C
C92 0.01 (TC)
C93 0.01 (TC)
INVERTER
Q20 DTA114YS
DOLBY
DOLBY:+5.1V
DOLBY:+0.1V
R280 47k
Q21 DTC114YS
DOLBY:+5.1V
DOLBY:-5.0V INVERTER
R281 47k
DOLBY:-5.0V
DOLBY:+5.1V
EXCEPT DOLBY
R243 R245 R241 R244 R246 R242
100K x6
CON301
L IN
R IN
R BBE OUT
L BBE OUT
R DSP IN
-VCC
L DSP IN
GND
R DSP OUT
+VCC
L DSP OUT
TO A MAIN C.B
CON323
F SUB C.B
C58 470p (TC)
D102 1SS132
Q22 DTC114YS
Q22 FOR CHANGE FILTER CHARACTERISTIC (DOLBY SURROUND OR EXCEPT IT)
GND
TO A MAIN C.B
MIC OUT 1
BUFFER
IC307 NJM4558L
C77 4.7/50
C79 4.7/50
C78 4.7/50
C80 4.7/50
R267 1k
R283 5.6k
R284 5.6k
R269 47k
C81 1200p
R271 3.9k
R273 18k
R268 1k
R270 47k
C82 1200p
R272 3.9k
R274 18k
C95 0.01
C94 0.01
CON302
REAR OUT
LCH OUT
RCH OUT
DSP/DOLBY
CS (SR-EVR)
CLK
DATA
TO A MAIN C.B
CON324

D DSP C.B

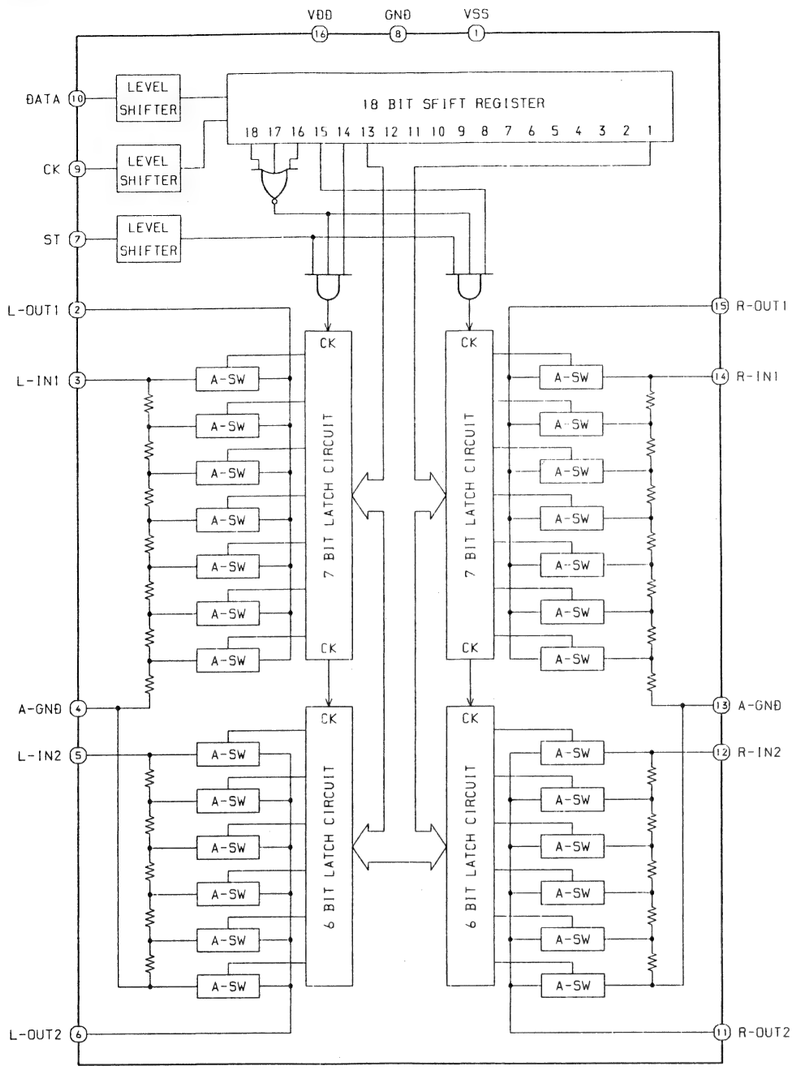

IC905
Ð-RAM
TMS44C256-10N
IC904 ÐSP
CX827010
IC906
ÐIGITAL
FILTER
SM5840E
IC907
Ð/A CONVERTER
PCM69AU
NJM2068
IC911
(1/2)
I/V CONV.
IC911
(2/2)
ACTIVE
FILTER
IC912
(1/2)
IC912
(2/2)
CON901
L-IN
R-IN
ANTI-
AREASING
FILTER
IC 902
NJM2068
IC903
A/Ð CONVERTER
CS5339
IC908
74HC00
IC909 74HC74
X901
22.57MHZ
Q904
RESET
Q901
RESET
Q902
RESET
IC901
U-COM
CXP81312-333Q
X902
IC910 (2/2)
74HC74
512fs
256fs
CONST. VOLT.
IC913
78L05
IC914
79L05
IC915
78M05
Q903
SW
OP AMP
+VCC
-VCC
+5V
-5V
VÐÐ
Ð-GNÐ
A-GNÐ
+VM
P-ON
O-DATA
OCS
O-CLK
L-OUT
R-OUT

D DSP C.B

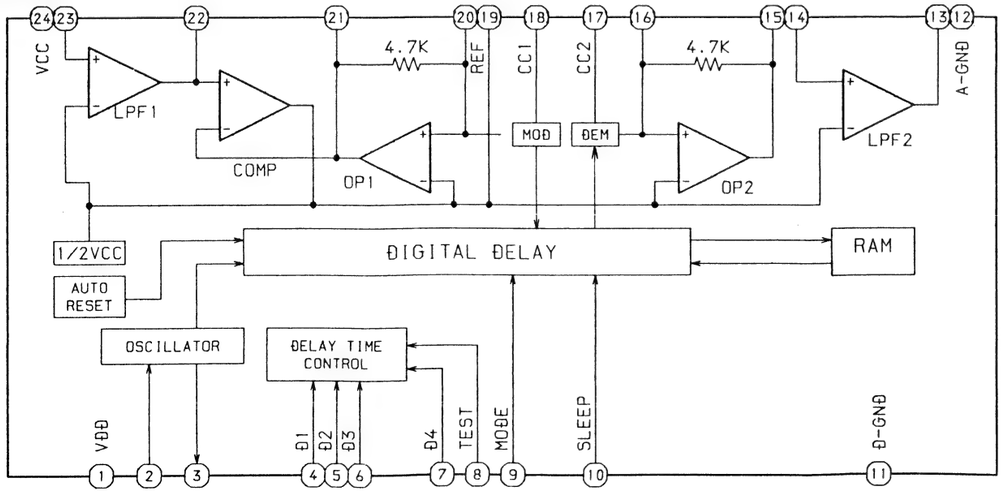
ANTI-AREASING FILTER
IC902 (1/2) NJM2068MD
IC902 (2/2) NJM2068MD
A/D CONVERTER IC903 CS5339
IC901 CXP81312-333Q μ-COM DSP
IC904 CX02701Q DSP
IC905 TMS44C256-10N D-RAM
IC906 SM5840ES
IC907 PCM69AU D/A CONVERTER
IC908 (1/4) 74HC00
IC908 (2/4) 74HC00
IC908 (3/4) 74HC00
IC908 (4/4) 74HC00
IC909 (1/2) 74HC74
IC909 (2/2) 74HC74
IC910 (1/2) 74HC74
IC910 (2/2) 74HC74
IC911 (1/2) NJM2068 MD
IC912 (1/2) NJM2068 MD
IC912 (2/2) NJM2068 MD
IC913 78L05
IC914 79L05
IC915 78M05
Q901 DTA144E
Q902 DTC144W
Q903 A952
Q904 DTC144W
D901 1SS226
D902 1SS226
D903 1SS132
X901 22.57MHz
X902 4.19MHz
CON901
FROM A MAIN C.B CON325
I/V CONVERTER
LPF
INITIAL (RESET)
INVERTER
RESET
POWER ON/OFF
IC913~915 CONSTANT VOLTAGE
DIGITAL SIGNAL FLOW
ANALOG SIGNAL FLOW

IC BLOCK DIAGRAM—2 (MX—Z7000M)

IC, TC9154AP

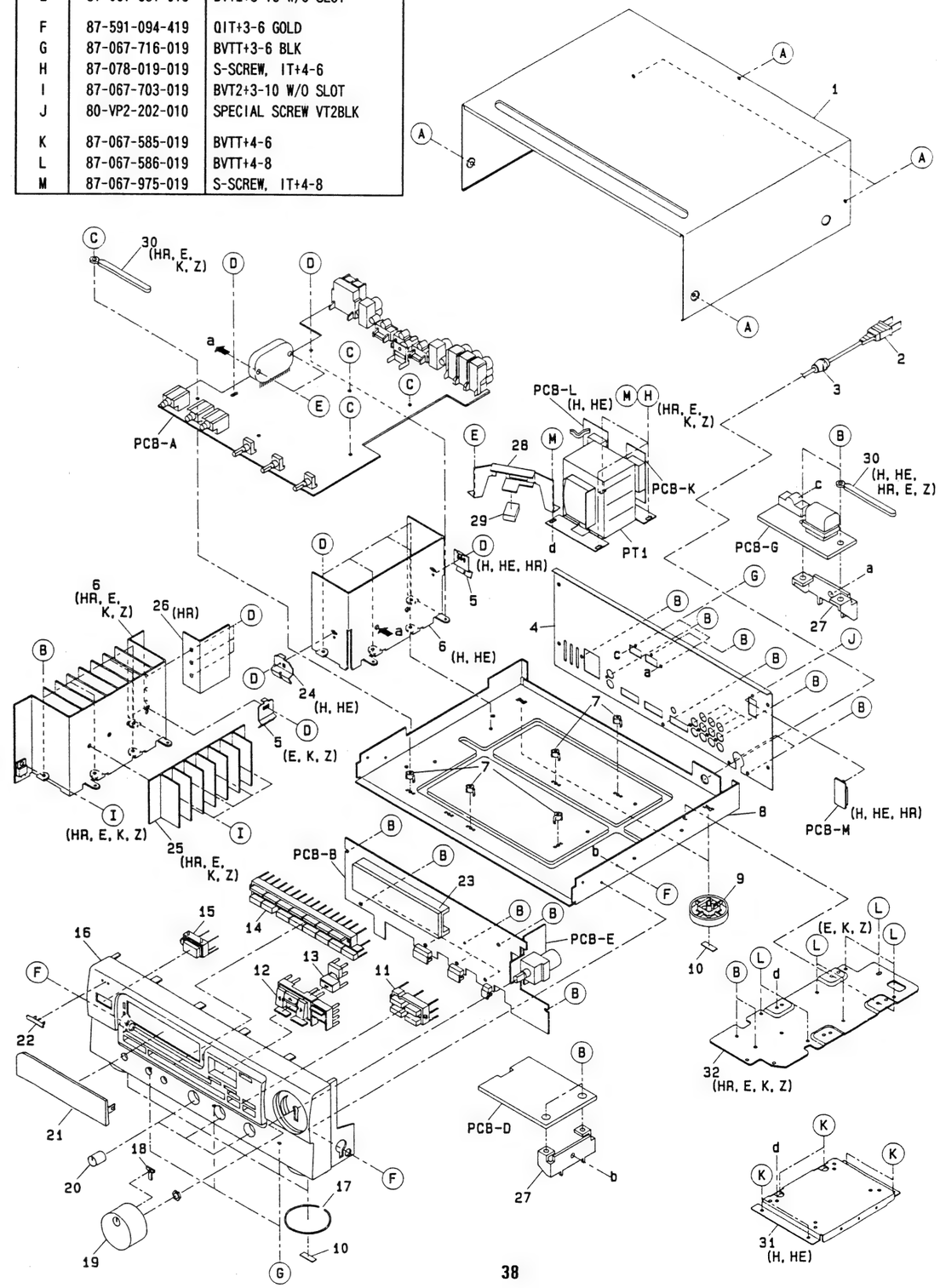


IC, M65831FP



EXPLODED VIEW (MX—Z7000M)

REF.	PART NO.	DESCRIPTION
A	87-067-641-019	UTT2+3-8 W/O SLOT BLK
B	87-067-660-019	BVT2+3-8 W/O SLOT BLK
C	87-067-758-019	BVT2+3-12 W/O SLOT
D	87-067-584-019	BVT2+3-6 W/O SLOT
E	87-067-581-019	BVT2+3-15 W/O SLOT
F	87-591-094-419	QIT+3-6 GOLD
G	87-067-716-019	BVTT+3-6 BLK
H	87-078-019-019	S-SCREW, IT+4-6
I	87-067-703-019	BVT2+3-10 W/O SLOT
J	80-VP2-202-010	SPECIAL SCREW VT2BLK
K	87-067-585-019	BVTT+4-6
L	87-067-586-019	BVTT+4-8
M	87-067-975-019	S-SCREW, IT+4-8



MECHANICAL PARTS LIST (MX－Z7000M)

DESCRIPTIONで判断できない物は "REFERENCE NAME LIST" を参照してください。
If can't understand for Description please kindly refer to "REFERENCE NAME LIST".

PART NO. CHANGED TO	REF. NO.	PART NO.	DESCRIPTION	COMMON MODEL	Q,TY
	1	★82-VP2-011-019	CAB, STEEL (H, HE)		1
	1	★82-VP2-023-019	CAB, STEEL HR (HR)		1
	1	★82-VP1-016-018	CAB, STEEL G (E, K, Z)	※	1
	2	★87-034-749-019	AC CORD, H W/PLUG (H)		1
	2	★87-050-034-019	AC CORD ASSY, E (HE, HR)		1
	2	★87-050-016-018	AC CORD ASSY, E (E, Z)		1
	2	★87-050-029-018	AC CORD ASSY, K 3P (K)		1
	3	★87-085-184-010	BUSHING, AC CORD D (H)		1
	3	★87-085-185-010	BUSHING, AC CORD E (EXCEPT H)		1
	4	★82-VP1-006-119	PANEL, REAR HJBN (H)	※	1
	4	★82-VP1-015-119	PANEL, REAR HEJBN (HE)	※	1
	4	★82-VP1-021-019	PANEL, REAR HRJBN (HR)	※	1
	4	★82-VP1-008-019	PANEL, REAR EBNE (E)	※	1
	4	★82-VP1-007-019	PANEL, REAR KBNE (K)	※	1
	4	★82-VP1-009-019	PANEL, REAR ZBNE (Z)	※	1
	5	---	HLDR, IC		1
	6	---	HT－SINK, ASSY		1
	7	---	HLDR, PCB 6.0		5
	8	---	CHAS, MAIN		1
	9	★81-VX1-012-019	FOOT, REAR		2
	10	★82-VW2-211-019	FELT, 20－7.5－2		4
	11	★82-VP2-006-019	KEY, BBE		1
	12	★82-VP1-013-019	KEY, CRSR	※	1
	13	★82-VP2-005-019	KEY, CRSR DOWN		1
	14	★82-VP1-012-019	KEY, FUN	※	1
	15	★82-VP2-002-019	KEY, POWER		1
	16	★82-VP1-011-019	CAB, FR LH (H)	※	1
	16	★82-VP1-001-019	CAB, FR H (HE, HR)	※	1
	16	★82-VP1-017-019	CAB, FR EX (E, K, Z)	※	1
	17	★81-VW1-015-010	RING, FOOT		2
	18	★82-MA2-026-019	IND, VOL		1
	19	★82-MA2-023-019	KNOB, VOL		1
	20	★81-VP1-005-019	KNOB, BBE		3
	21	★82-VP2-007-019	WINDOW, AMP		1
	22	★81-DS1-011-019	BADGE, AIWA N		1
	23	★82-MA2-203-019	GUIDE, FL 2		1
	24	---	HLDR, IC 2 (H, HE)		1
	25	---	HT－SINK SUB (HR, E, K, Z)		1
	26	---	HT－SINK, FIN L (HR)		1
	27	---	HLDR, PCB GEQ		2
	28	---	HLDR, PCB DSP		1
	29	★84-711-306-019	G－CUSHION 10－5－5		1
	30	---	WIRE BINDER		1 (H, HE, K) 2 (HR, E, Z)
	31	---	HLDR, PT (H, HE)		1
	32	---	PLATE, PT G (HR, E, K, Z)		1

MODEL NO.

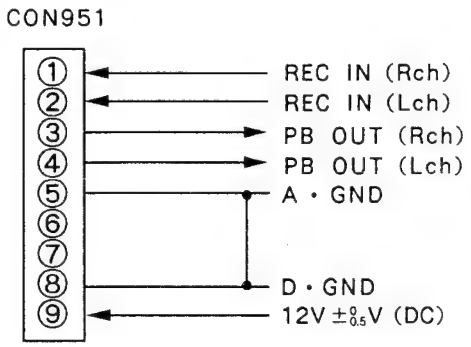
FX-WZ7000

CAUTIONS WHEN SERVICING (FX-WZ7000)

Model FX-WZ7000 does not have a power supply circuit. Power is supplied to it through a 9-pin flat cable and the signal inputs/outputs are also perfomed through this cable.
When servicing the FX-WZ7000 connect it to the MX-Z7000M so power is supplied to the FX-WZ7000. If the MX-Z7000M is not available, follow the procedure below.

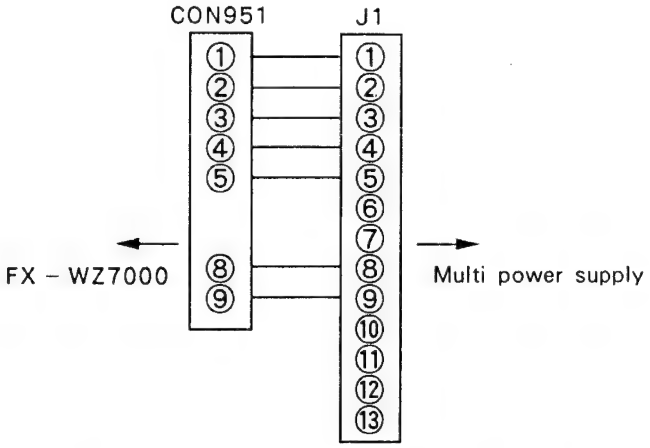
[When servicing the unassembled FX-WZ7000]

①Supply the following voltages to each terminal from an external power supply.



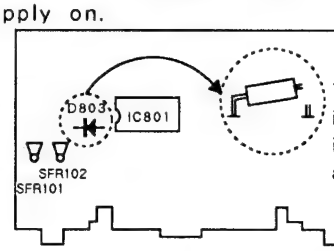
②Connection diagram when using multi power supply. (LPS-9088)

• Connect a multi-conversion harness for the D5 type to J1.

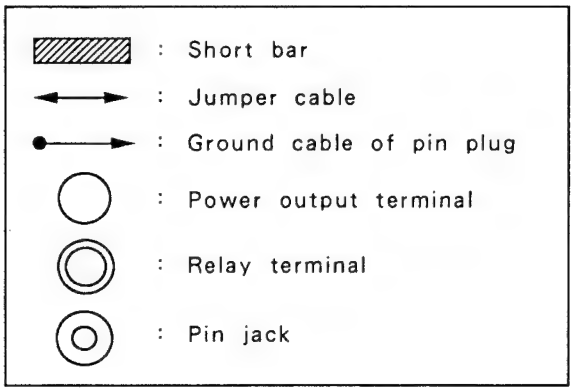


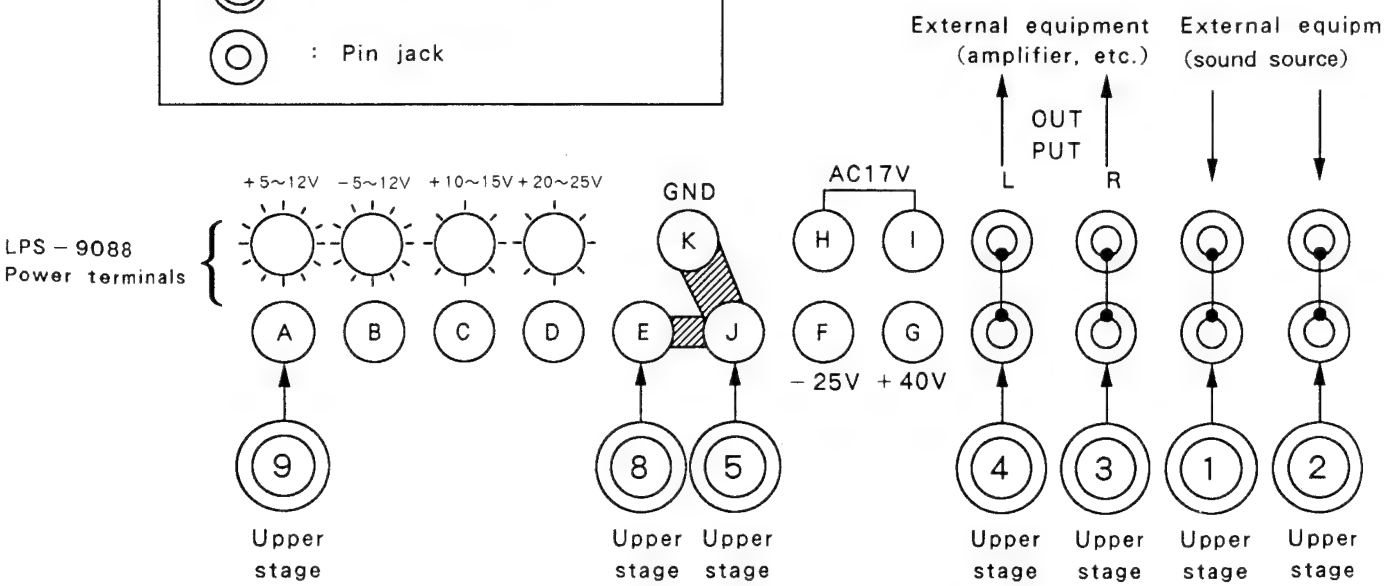
Connect a multi-conversion harness

• After connecting the multi-conversion harness, connect the leg of the diode D803 on the pattern of the main C.B and then turn the multi-power supply on.



The diode D803 itself is above the pattern with its one leg is cut as shown at left.





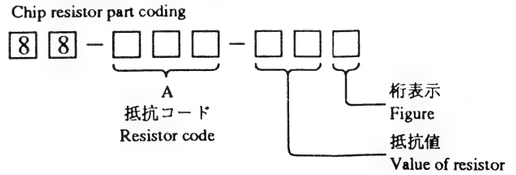
ELECTRICAL MAIN PARTS LIST (FX－WZ7000)

DESCRIPTIONで判断できない物は“REFERENCE NAME LIST”を参照してください。
If can't understand for Description please kindly refer to “REFERENCE NAME LIST”.

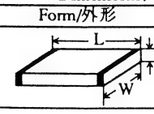
REF. NO	PART NO.	ｶﾝﾘ NO.	DESCRIPTION
IC			
	87-001-334-010		IC, LB9051A
	87-001-908-019		IC, CXA1332S
	87-002-861-010		IC, CXP2201 AS
	82-VW2-631-010		IC, LC66406-4B19
	87-017-022-089		IC, NJM2068M-D(T1)
	87-001-607-089		IC, NJM4558M
	87-017-023-089		IC, NJU4052BM
	87-001-224-089		IC, NJU4066BM
	87-020-730-089		IC, TC4069UBF
TRANSISTOR			
	89-503-685-089		C-FET, 2SK368GR
	89-113-625-089		C-TR, 2SA1362GR(TAPG)
	89-327-125-089		C-TR, 2SC2712GR
	89-333-266-089		C-TR, 2SC3326B
	87-026-580-089		C-TR, DTA123JK
	87-026-223-089		C-TR, DTC143TK
	87-026-210-089		C-TR, DTC144EK T147
	87-026-227-089		C-TR, DTA114EK
	87-026-463-080		TR, 2SA933S (RS)
	89-112-965-089		TR, 2SA1296GR
	89-109-521-089		TR, 2SA952K
	89-318-155-089		TR, 2SC1815GR
	89-320-011-089		TR, 2SC2001K
	89-413-023-089		TR, 2SD1302S
DIODE			
	87-017-024-089		C-DIODE, DA204K
	87-020-331-089		C-DIODE, DAN202K
	87-020-330-089		C-DIODE, DAP202K
	87-020-584-089		C-ZENER, 02CZ5.6Y
	87-020-123-089		DIODE, DS446-AT(TA)
	87-001-559-059		DIODE, 1SS131, RA
	87-002-564-089		DIODE, 1SS133 RA
	87-020-109-019		LED, SLF-201C(YJ)
	87-027-329-089		ZENER, HZ22-L3
	87-017-069-059		ZENER, HZS3A1(RA)
	87-017-091-089		ZENER, HZS5C1
	87-001-290-059		ZENER, HZS6B1L RA
	87-001-731-059		ZENER, HZS7C2L RA
MAIN C.B			
C101	87-012-158-089		C-CAP, S 390P-50 CH
C102	87-012-158-089		C-CAP, S 390P-50 CH
C103	87-010-318-089		C-CAP, S 47P-50 CH
C104	87-010-318-089		C-CAP, S 47P-50 CH
C105	87-010-426-089		C-CAP, S 0.012-25 B
C106	87-010-426-089		C-CAP, S 0.012-25 B
C109	87-012-154-089		C-CAP, S 150P-50 CH
C110	87-012-154-089		C-CAP, S 150P-50 CH
C111	87-010-404-089		CAP, E 4.7-50 SME
C112	87-010-404-089		CAP, E 4.7-50 SME
C113	87-010-404-089		CAP, E 4.7-50 SME
C114	87-010-404-089		CAP, E 4.7-50 SME
C115	87-010-101-089		CAP, E 220-16 SME
C116	87-010-197-089		C-CAP, S 0.01-25 B
C117	87-010-197-089		C-CAP, S 0.01-25 B
C201	87-012-157-089		C-CAP, S 330P-50 CH
C202	87-012-157-089		C-CAP, S 330P-50 CH
C203	87-010-318-089		C-CAP, S 47P-50 CH
C204	87-010-318-089		C-CAP, S 47P-50 CH
C205	87-010-426-089		C-CAP, S 0.012-25 B
C206	87-010-426-089		C-CAP, S 0.012-25 B
C207	87-012-156-089		C-CAP, S 220P CH
C208	87-012-156-089		C-CAP, S 220P CH
C211	87-010-404-089		CAP, E 4.7-50 SME
C212	87-010-404-089		CAP, E 4.7-50 SME
C213	87-010-101-089		CAP, E 220-16 SME
C214	87-010-197-089		C-CAP, S 0.01-25 B
C215	87-010-197-089		C-CAP, S 0.01-25 B
C251	87-010-186-089		C-CAP, S 4700P-50 B
C252	87-010-149-089		C-CAP, S 5P-50 CH
C253	87-010-182-089		C-CAP, S 2200P-50 B
C254	87-010-596-089		C-CAP, S 0.047-16 RK
C255	87-012-154-089		C-CAP, S 150P-50 CH
C256	87-010-374-089		CAP, E 47-10
C257	87-010-401-089		CAP, E 1-50 SME
C258	87-010-149-089		C-CAP, S 5P-50 CH
C259	87-010-178-089		C-CAP, S 1000P-50 B
C301	87-010-321-089		C-CAP, S 82P-50 CH
C302	87-010-321-089		C-CAP, S 82P-50 CH
C303	87-010-183-089		C-CAP, S 2700P-50 B
C304	87-010-183-089		C-CAP, S 2700P-50 B
C305	87-010-404-089		CAP, E 4.7-50 SME
C306	87-010-404-089		CAP, E 4.7-50 SME
C323	87-012-157-089		C-CAP, S 330P-50 CH
C324	87-012-157-089		C-CAP, S 330P-50 CH
C401	87-012-156-089		C-CAP, S 220P CH
C402	87-012-156-089		C-CAP, S 220P CH
C403	87-014-071-089		CAP, PP 3900P-100 J
C405	87-010-221-089		CAP, E 470-10
C409	87-010-402-089		CAP, E 2.2-50 SME
C451	87-010-178-089		C-CAP, S 1000P-50 B
C453	87-010-322-089		C-CAP, S 100P-50 CH
C454	87-010-322-089		C-CAP, S 100P-50 CH
C501	87-010-175-089		C-CAP, S 560P-50 SL
C502	87-010-175-089		C-CAP, S 560P-50 SL
C503	87-010-182-089		C-CAP, S 2200P-50 B
C504	87-010-182-089		C-CAP, S 2200P-50 B
C505	87-010-404-089		CAP, E 4.7-50 SME
C506	87-010-404-089		CAP, E 4.7-50 SME
C507	87-010-182-089		C-CAP, S 2200P-50 B
C508	87-010-182-089		C-CAP, S 2200P-50 B
C509	87-010-182-089		C-CAP, S 2200P-50 B
C510	87-010-182-089		C-CAP, S 2200P-50 B
C511	87-010-825-089		CAP, E 0.56/50V, SME
C512	87-010-825-089		CAP, E 0.56/50V, SME
C513	87-010-546-089		CAP, E 0.33-50 SME
C514	87-010-546-089		CAP, E 0.33-50 SME
C515	87-010-404-089		CAP, E 4.7-50 SME
C516	87-010-404-089		CAP, E 4.7-50 SME
C517	87-010-371-089		CAP, E 470-6.3
C518	87-010-101-089		CAP, E 220-16 SME
C519	87-012-360-089		C-CAP, S 1-10FZ
C520	87-012-360-089		C-CAP, S 1-10FZ
C521	87-010-179-089		C-CAP, S 1200P-50 B
C522	87-010-179-089		C-CAP, S 1200P-50 B
C601	87-010-404-089		CAP, E 4.7-50 SME
C602	87-010-237-089		CAP, E 1000-16
C603	87-010-101-089		CAP, E 220-16 SME
C604	87-010-237-089		CAP, E 1000-16
C605	87-010-198-089		C-CAP, S 0.022-25 B
C606	87-010-546-089		CAP, E 0.33-50 SME
C607	87-010-371-089		CAP, E 470-6.3
C608	87-010-198-089		C-CAP, S 0.022-25 B
C609	87-015-822-089		C-CAP, 0.022
C751	87-010-546-089		CAP, E 0.33-50 SME
C752	87-010-546-089		CAP, E 0.33-50 SME
C753	87-010-405-089		CAP, E 10-50 SME
C754	87-010-405-089		CAP, E 10-50 SME
C755	87-010-263-089		CAP, E 100-10
C756	87-010-260-089		CAP, E 47-25 SME
C801	87-010-404-089		CAP, E 4.7-50 SME
C951	87-012-140-089		C-CAP, S 470P-50 CH
C952	87-010-186-089		C-CAP, S 4700P-50 B
CF801	89-MX1-704-089		CERA LOCK(MU)3.9MHZ
CON801	82-VW2-624-019		F-CABLE 3P-2.0
CON951	82-VW2-623-019		CORD, FG 9P-1.5
L301	87-005-525-089		COIL, 22MH-J
L302	87-005-525-089		COIL, 22MH-J
L303	87-003-131-089		COIL, 10MH J
L304	87-003-131-089		COIL, 10MH J
L305	87-003-123-089		COIL, 2.2MH J
L306	87-003-123-089		COIL, 2.2MH J
L401	80-VW1-605-119		COIL, OSC BIAS 108K
L601	87-005-474-089		COIL, 12UH J FLR50
L602	87-005-239-019		COIL, 100UH
R408	87-025-471-089		RES NF 4.7-1/4WJ
SFR101	87-024-349-089		SFR, 1K DIA6 H
SFR102	87-024-349-089		SFR, 1K DIA6 H
SFR201	87-024-349-089		SFR, 1K DIA6 H
SFR202	87-024-349-089		SFR, 1K DIA6 H
SFR301	87-024-353-089		SFR, 10K DIA6 H
SFR302	87-024-353-089		SFR, 10K DIA6 H
SFR401	87-024-356-089		SFR, 47K DIA6 H
SFR402	87-024-356-089		SFR, 47K DIA6 H
FRONT-1 C.B			
S905	87-036-215-089		SW, TACT EVQ21404M(YJ)
S905	87-036-259-089		SW, TACT SKHVBB(Y)
S906	87-036-215-089		SW, TACT EVQ21404M(YJ)
S906	87-036-259-089		SW, TACT SKHVBB(Y)
S907	87-036-215-089		SW, TACT EVQ21404M(YJ)
S907	87-036-259-089		SW, TACT SKHVBB(Y)
S908	87-036-215-089		SW, TACT EVQ21404M(YJ)
S908	87-036-259-089		SW, TACT SKHVBB(Y)
FRONT-2 C.B			
C901	87-010-263-089		CAP, E 100-10
C904	87-018-214-089		CAP, TC U 0.1-50 F
C908	87-016-251-049		CAP, E 220-16 SMG
C910	87-014-067-089		CAP, PP 2700P-100 J
C912	87-010-407-089		CAP, E 33-50 SME
C913	87-018-214-089		CAP, TC U 0.1-50 F
C914	87-018-214-089		CAP, TC U 0.1-50 F
CF901	89-MX1-704-089		CERA LOCK(MU)3.9MHZ
FL901	82-VW1-621-010		FL BJ125GK
FR901	87-025-471-089		RES, NF 4.7-1/4WJ
FR902	87-025-471-089		RES, NF 4.7-1/4WJ
L901	87-003-051-089		COIL, 470UH
L902	87-003-102-089		COIL, 10UH
S901	87-036-215-089		SW, TACT EVQ21404M(YJ)
S901	87-036-259-089		SW, TACT SKHVBB(Y)
S902	87-036-215-089		SW, TACT EVQ21404M(YJ)
S902	87-036-259-089		SW, TACT SKHVBB(Y)
S903	87-036-215-089		SW, TACT EVQ21404M(YJ)
S903	87-036-259-089		SW, TACT SKHVBB(Y)
S904	87-036-215-089		SW, TACT EVQ21404M(YJ)
S904	87-036-259-089		SW, TACT SKHVBB(Y)
S909	87-036-215-089		SW, TACT EVQ21404M(YJ)
S909	87-036-259-089		SW, TACT SKHVBB(Y)
S911	87-036-215-089		SW, TACT EVQ21404M(YJ)
S911	87-036-259-089		SW, TACT SKHVBB(Y)
S912	87-036-215-089		SW, TACT EVQ21404M(YJ)
S912	87-036-259-089		SW, TACT SKHVBB(Y)
S913	87-036-215-089		SW, TACT EVQ21404M(YJ)
S913	87-036-259-089		SW, TACT SKHVBB(Y)
S914	87-036-215-089		SW, TACT EVQ21404M(YJ)
S914	87-036-259-089		SW, TACT SKHVBB(Y)
S915	87-036-215-089		SW, TACT EVQ21404M(YJ)
S915	87-036-259-089		SW, TACT SKHVBB(Y)
S916	87-036-215-089		SW, TACT EVQ21404M(YJ)
S916	87-036-259-089		SW, TACT SKHVBB(Y)
S917	87-036-215-089		SW, TACT EVQ21404M(YJ)
S917	87-036-259-089		SW, TACT SKHVBB(Y)
T901	82-VW1-623-019		COIL, FL
DECK-1 C.B			
M1	87-045-348-010		MOT, SHW 2L 70
PIN701	87-009-236-010		CONN, 8P PH H
SFR1	87-024-170-080		SFR, 3.3K DIA 6V
SFR2	87-024-171-080		SFR, 4.7K DIA 6V
SOL1	82-ZM1-618-010		SOL ASSY, 27
SW4	87-036-110-010		SW, PUSH SPPB 62
SW5	87-036-110-010		SW, PUSH SPPB 62
SW6	87-036-110-010		SW, PUSH SPPB 62
DECK-2 C.B			
M2	87-045-348-010		MOT, SHW 2L 70
PIN702	87-009-752-010		CONN, 11P PH H WHT
SFR1	87-024-170-080		SFR, 3.3K DIA 6V
SFR2	87-024-171-080		SFR, 4.7K DIA 6V
SOL2	82-ZM1-618-010		SOL ASSY, 27
SW1	87-036-110-010		SW, PUSH SPPB 62
SW2	87-036-110-010		SW, PUSH SPPB 62
SW3	87-036-110-010		SW, PUSH SPPB 62
SW4	87-036-110-010		SW, PUSH SPPB 62
SW5	87-036-110-010		SW, PUSH SPPB 62
SW6	87-036-110-010		SW, PUSH SPPB 62
RELAY-1 C.B			
RELAY-2 C.B			
MISCELLANEOUS			
PH	87-046-355-010		HEAD, PH HADKH2529B (D1)
RPH	87-046-356-010		HEAD, RPH HADKH5581B (D2)

○チップ抵抗部品コード／CHIP RESISTOR PART CODE

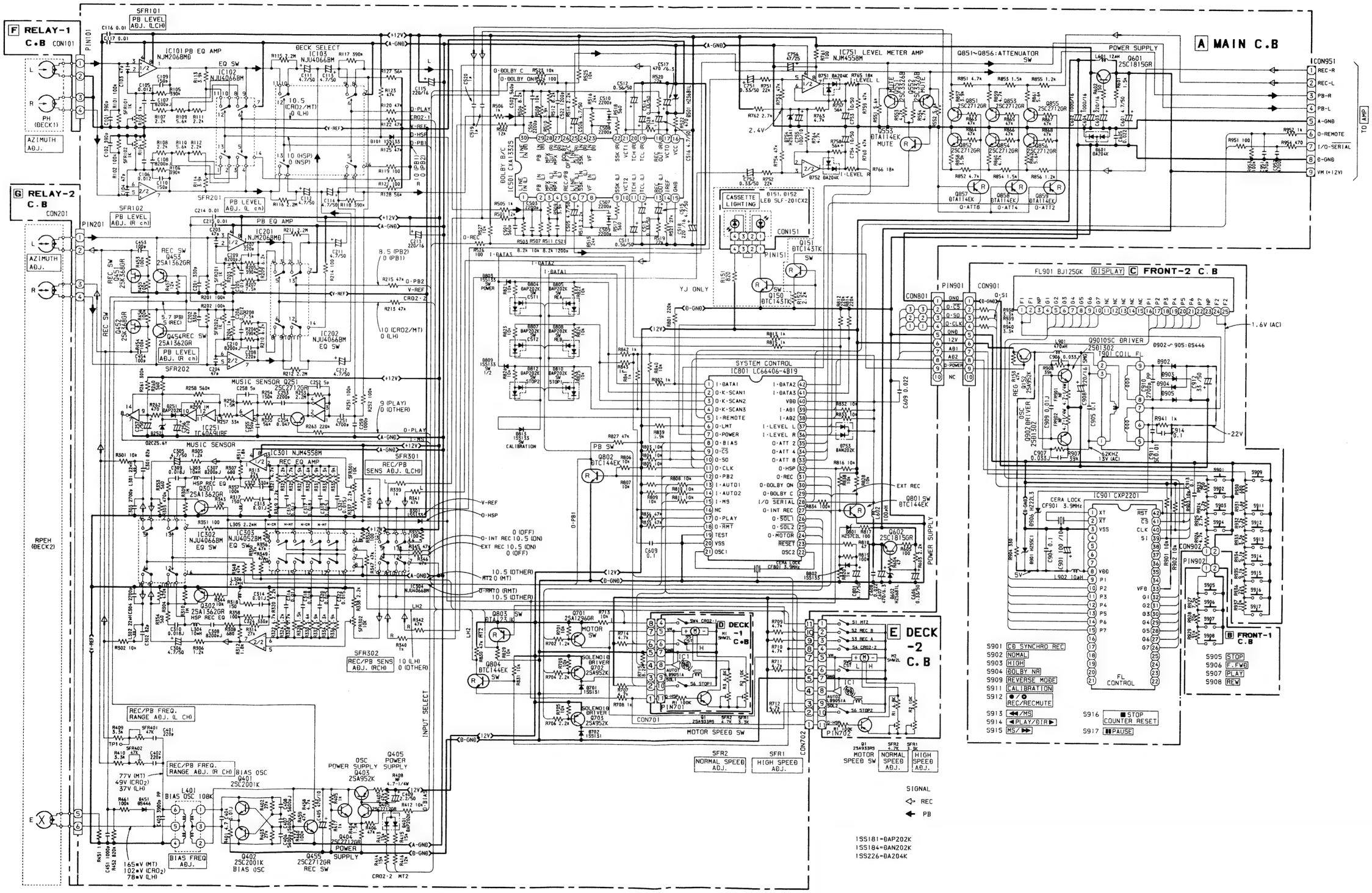
チップ抵抗部品コードの成り立ち
Chip resistor part coding



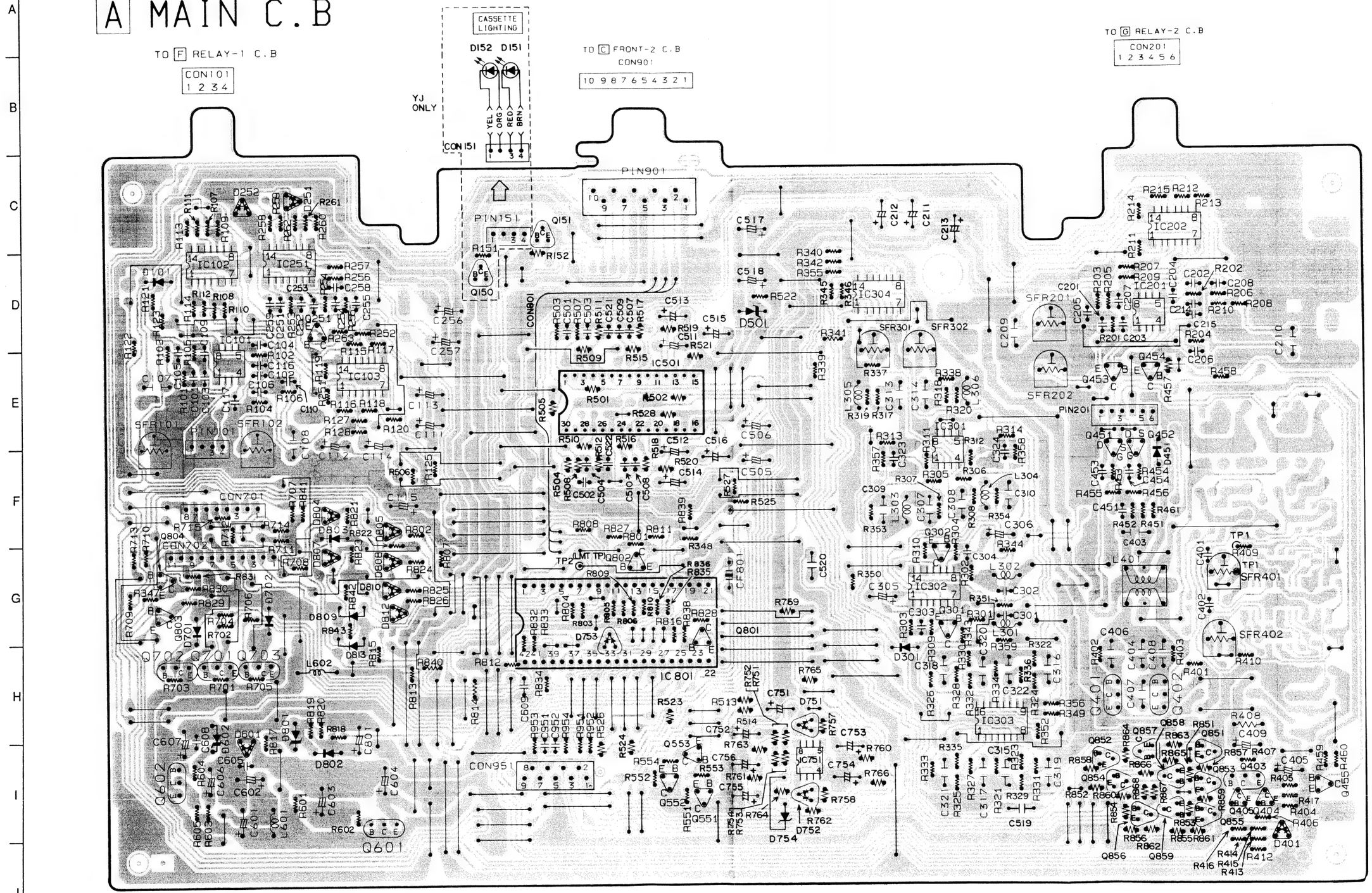
チップ抵抗
Chip resistor

Wattage 容量	Type 種類	Tolerance 許容誤差	Symbol 記号	Dimensions／寸法 (mm) Form/外形	L	W	t	Resistor code : A 抵抗コード : A
1/32W	1608	±5%	CJ		1.6	0.8	0.35	108
1/10W	2125	±5%	CJ		2	1.25	1.45	118
1/8W	3216	±5%	CJ		3.2	1.6	0.5 ～0.7	128

SCHEMATIC DIAGRAM (FX – WZ7000)



A MAIN C.B



11109 8 7 6 5 4 3 2 1

TO E ĐECK-2 C.B
PIN702

8 7 6 5 4 3 2 1

TO Đ ĐECK-1 C.B
PIN701

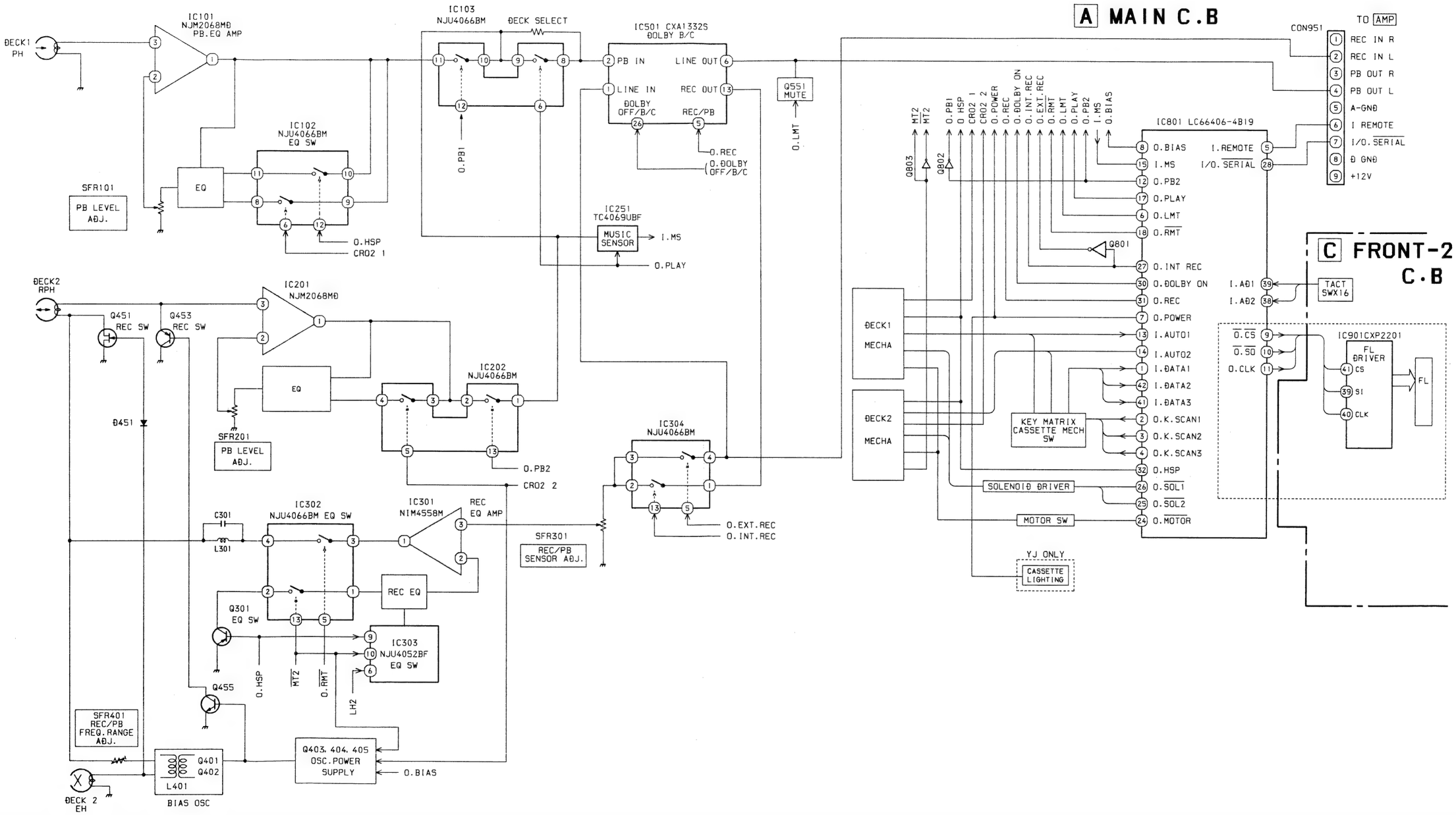
9 8 7 6 5 4 3 2 1
CON951

TO AMP

GRAPHIC SYMBOLS PRINTED CIRCUIT BOARD OF ELECT. CAP. ARE DESIGNED AS NEGATIVE POLE.

(プリント基板内のケミコンの極性表示はθ表示です。)

BLOCK DIAGRAM (FX – WZ7000)

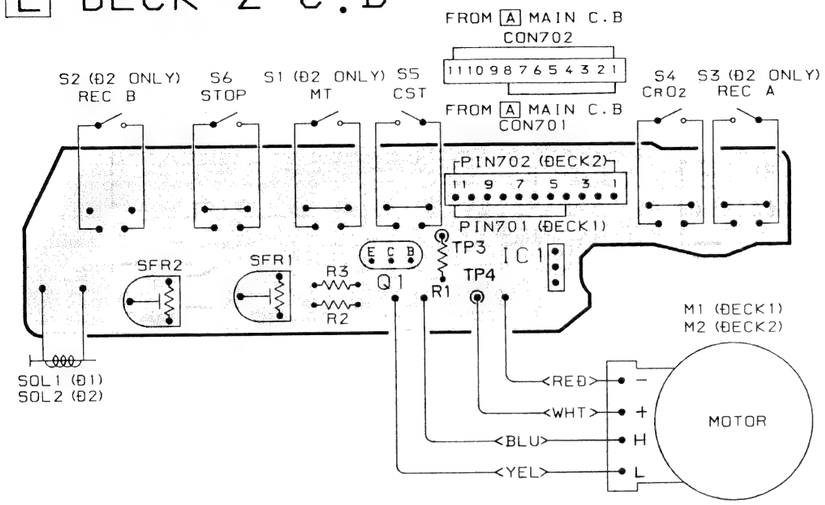


GRAPHIC SYMBOLS PRINTED CIRCUIT BOARD OF ELECT. CAP. ARE DESIGNED AS NEGATIVE POLE.

(プリント基板内のケミコンの極性表示はθ表示です。)

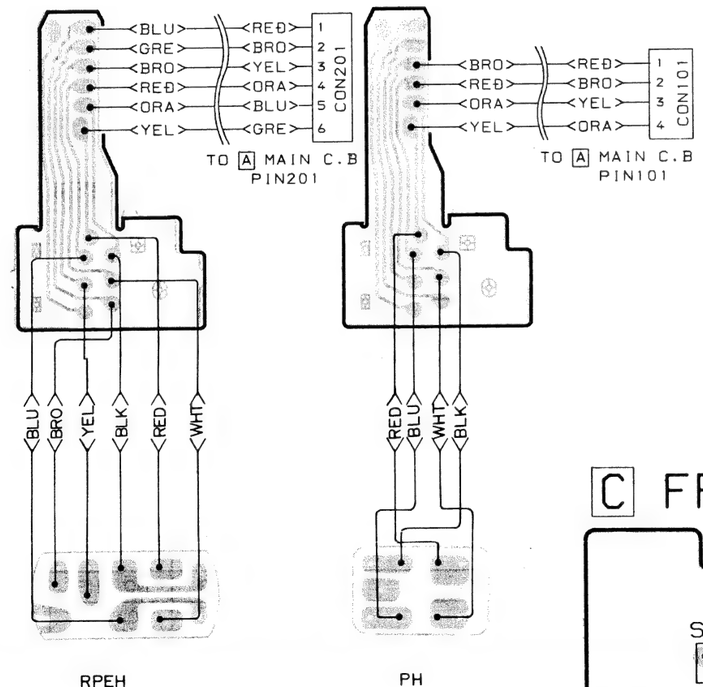
D ΘECK-1 C.B

E ΘECK-2 C.B

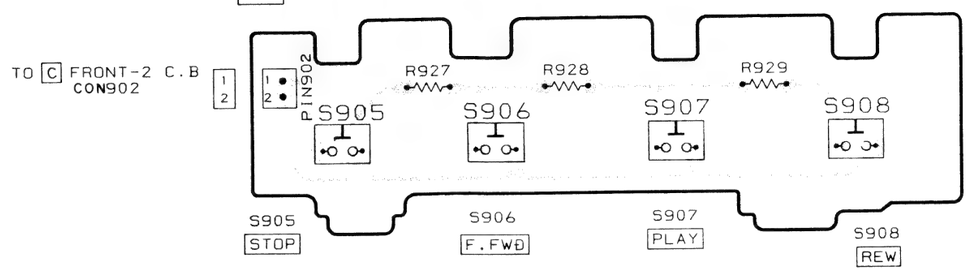


G RELAY-2 C.B

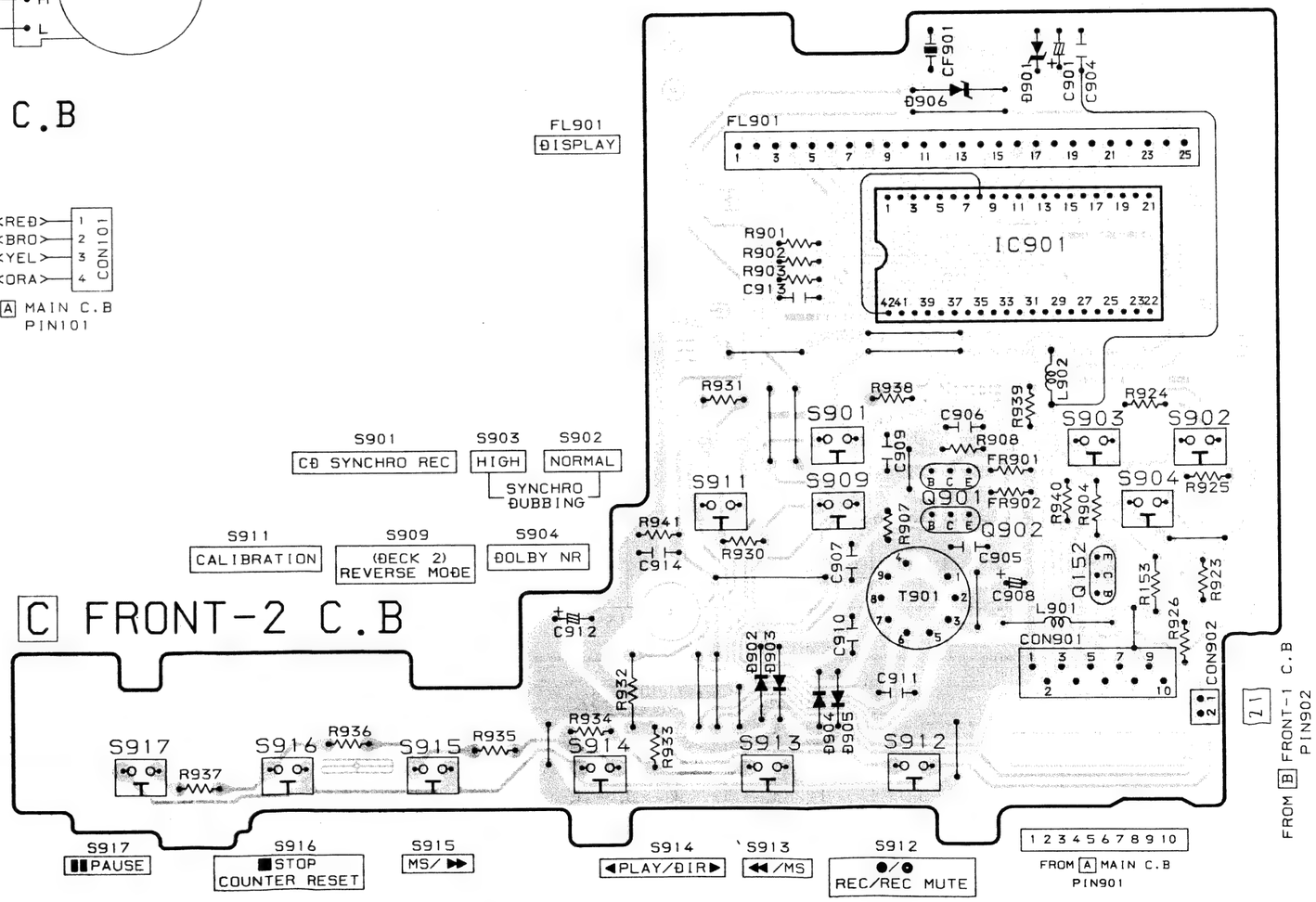
F RELAY-1 C.B



B FRONT-1 C.B



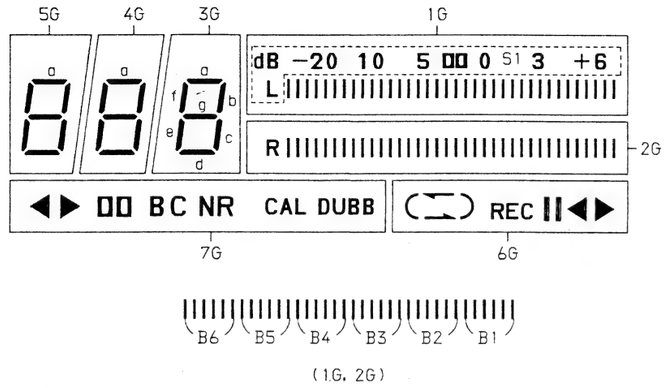
C FRONT-2 C.B



FL / IC BLOCK DIAGRAM (FX—WZ7000)

FL, BJ125GK

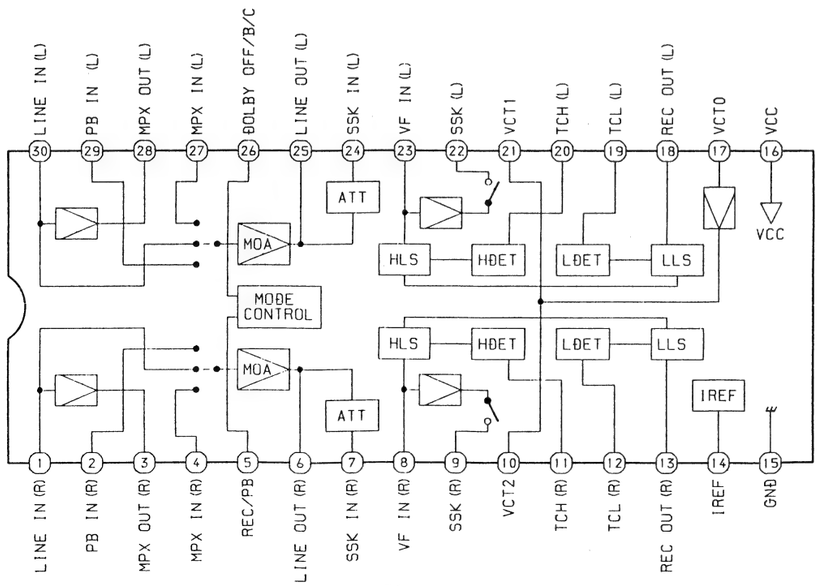
GRID ASSIGNMENT



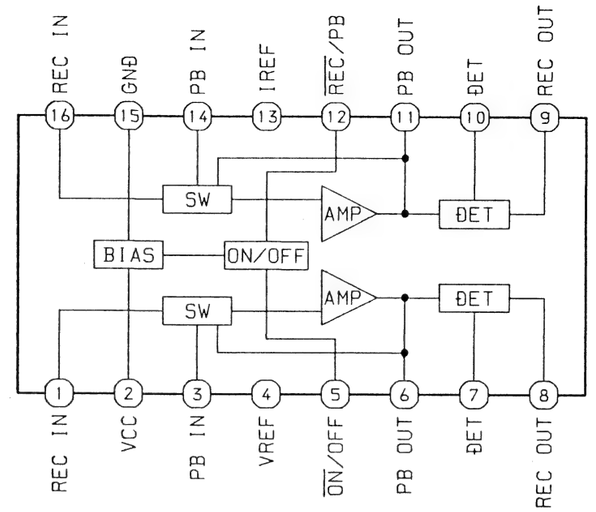
ANODE CONNECTION

	7G	6G	5G	4G	3G	2G	1G
P1	**DUBB**	▶	a	a	a	B1	B1
P2	**CAL**	◀	b	b	b	B2	B2
P3	**C**	‖	c	c	c	B3	B3
P4	**B**	**REC**	d	d	d	B4	B4
P5	**NR**	)	e	e	e	B5	B5
P6	▶	‖◀	f	f	f	B6	B6
P7	◀	(	g	g	g	**R**	S1

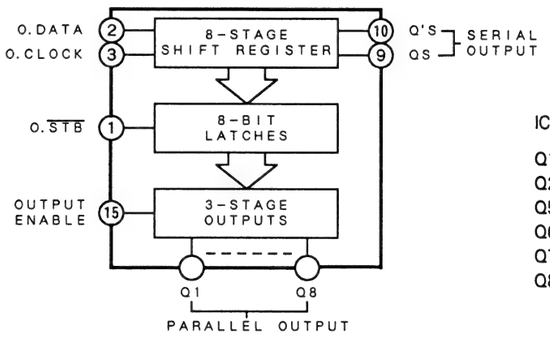
IC, CXA1332S



IC, HA12134A



IC, BU4094B



IC901

Q1 : O.$\overline{\text{LED}}$ $\overline{\text{DOLBY B}}$
Q2~Q4 : NC
Q5 : O.$\overline{\text{LED}}$ ▷1
Q6 : O.$\overline{\text{LED}}$ ◁1
Q7 : O.$\overline{\text{LED}}$ ▷2
Q8 : O.$\overline{\text{LED}}$ ◁2

IC902

Q1 : O.$\overline{\text{LED}}$ REC
Q2 : O.$\overline{\text{LED}}$ CD
Q3 : O.$\overline{\text{LED}}$ DECK
Q4 : NC
Q5 : O.$\overline{\text{LED}}$ ⇄
Q6 : O.LED ⟲
Q7 : O.LED ⟳
Q8 : O.$\overline{\text{LED}}$ $\overline{\text{PAUSE}}$

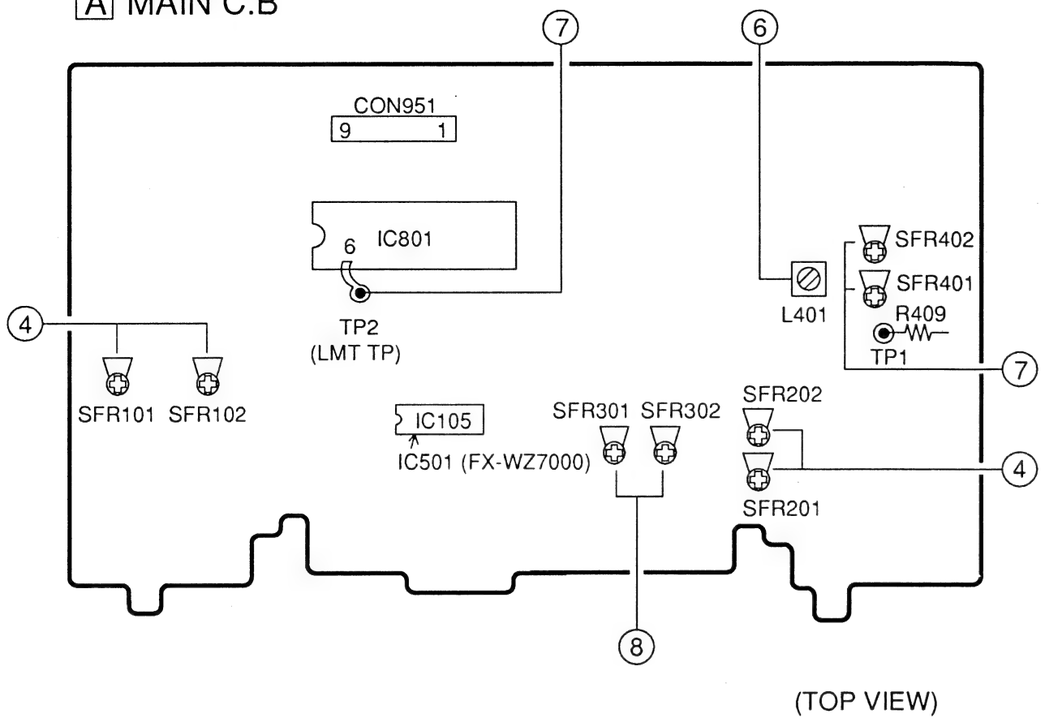
TRUTH TABLE

CLOCK	OUTPUT ENABLE	STROBE	DATA	PARALLEL OUTPUTS		SERIAL OUTPUTS	
				Q1	Qn	QS	Q'S
↓	L	×	×	Z	Z	Q7	NO CHG.
↓	L	×	×	Z	Z	NO CHG.	QS
↑	H	L	×	NO CHG.	NO CHG.	Q7	NO CHG.
↑	H	H	L	L	Qn − 1	Q7	NO CHG.
↑	H	H	H	H	Qn − 1	Q7	NO CHG.
↓	H	×	×	NO CHG.	NO CHG.	NO CHG.	QS

Z = HIGH IMPEDANCE × = DON'T CARE

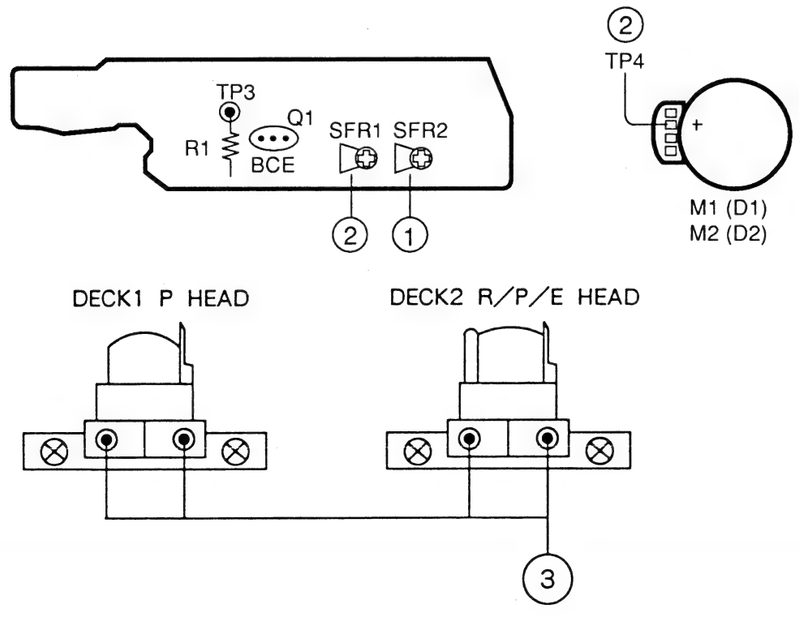
ADJUSTMENT (FX－WZ7000)

A MAIN C.B



(TOP VIEW)

D DECK－1 C.B
E DECK－2 C.B



1. Normal Speed Adjustment (DECK1, DECK2)
   Settings: · Test tape: TTA-100 (TTA-111S)
   · Test Point : PB-OUT (CON951)
   · Adjustment Location: SFR2 (DECK1)
   SFR2 (DECK2)
   Method: Play back the test tape, adjust for 3000 ±7Hz.

2. High Speed Adjustment (DECK1, DECK2)
   Settings: · Test tape: TTA-100 (TTA-111S)
   · Test Point : PB-OUT (CON951)
   · Adjustment Location: SFR1 (DECK1)
   SFR1 (DECK2)
   Method: After normal speed adjustment, play back the test tape, and make the high speed condition to be shorted between TP3 and TP4. Adjust for 6000 ±10Hz.

3. Head Azimuth Adjustment (DECK1, DECK2)
   Settings: · Test tape: TTA-310 (TTA-317E, SCC-1429)
   · Test Point : PB-OUT (CON951)
   · Adjustment Location: Head azimuth
   adjustment screw
   Method: Play back the 10kHz signal of the test tape and adjust so that the output becomes maximum in each FWD PLAY and REV PLAY mode.

4. PB Level Adjustment (DECK1, DECK2)
   Settings: · Test tape: TTA-200 (TTA-161, TCC-130)
   · Test Point : PB-OUT (CON951)
   · Adjustment Location: SFR101 (DECK1, Lch)
   SFR102 (DECK1, Rch)
   SFR201 (DECK2, Lch)
   SFR202 (DECK2, Rch)
   Method: Play back the test tape and adjust so that the output becomes 280mV ± 15mV.

5. FWD/REV Playback Output Difference Check (DECK1, DECK2)
   Settings: · Test tape: TTA-200 (TTA-161, TCC-130)
   · Test Point : PB-OUT (CON951)
   Method: Play back the test tape and make sure that the output difference between the FWD and REV modes is 0dB ±0.7dB.

6. Bias Frequency Adjustment (DECK2)
   Settings: · Test tape: TTA-601 (TTA-600, TTA-119K)
   · Test Point : TP1
   · Adjustment Location: L401
   Method: Set DECK2 to the record mode and adjust L401 so that the frequency at TP1 is 107.5kHz ±1.5kHz.

7. REC/PB Frequency Response Adjustment (DECK2)
   Settings: · Test tape: TTA-601 (TTA-600, TTA-119K)
   · Test Point : PB-OUT (CON951)
   · Adjustment Location: SFR401 (Lch)
   SFR402 (Rch)
   Method: Connect TP2 (LMT TP) to ground (chassis), apply a 1kHz signal and adjust attenuator so that the level at the PB OUT is 25mV.
   Record and play back the 1kHz and 10kHz signals and adjust so that the output level of 10kHz signal is 0dB ±0.3dB for 1kHz signal. After adjustment, remove the grounding lead wire.

8. REC/PB Sensitivity Adjustment (DECK2)
   Settings: · Test tape: TTA-601 (TTA-600, TTA-119K)
   · Test Point : PB-OUT (CON951)
   · Adjustment Location: SFR301(Lch)
   SFR302 (Rch)
   Method: Connect TP2 (LMT TP) to ground (chassis), apply a 1kHz signal and adjust attenuator so that the level at the PB OUT is 25mV.
   Record and play back the 1kHz signal and adjust so that the output level of is 25mV ±0.3dB. After adjustment, remove the grounding lead wire.

PRACTICAL SERVICE FIGURE (FX－WZ7000)

PB output level:	280mV ±34mV TTA-200 (TTA-161, TCC-130)
REC/PB output level:	250mV ±1dB (PB-OUT, 1kHz)
Distortion (REC/PB):	Less than 2.0% (NORM., CrO_2)
Erasing ratio:	More than 60dB
Crosstalk:	More than 60dB
Channel separation:	More than 35dB
Noise (REC/PB):	Less than 2.0mV (DOLBY OFF NORM.)
	Less than 1.0mV. (DOLBY B ON CrO_2, MT)
	Less than 0.8mV (DOLBY C ON CrO_2, MT)
Noise (PB):	Less than 1.8mV (DOLBY OFF NORM.)
	Less than 0.9mV (DOLBY B ON CrO_2)
	Less than 0.8mV (DOLBY C ON CrO_2)
Recording bias frequency:	108kHz
Tape speed:	3000Hz ±1.5%
Wow & flutter (W.RMS):	Less than 0.18% (DECK1, 2)
Take-up torque:	30～55g-cm (DECK1, 2)
F.F & REW torque:	75～160g-cm (DECK1, 2)
Back tension:	2～6g-cm (DECK1, 2)
Test tape:	NORMAL: TTA-601 (TTA-600, TTA-119K)
	CrO_2: TTA-610 (TTA-1191I)

IC, LC66406-4B19

Pin No.	Pin Name	I/O	Description
			KEY DATA input
			When K · SCAN1 is "H" / When K · SCAN2 is "H" / When K · SCAN3 is "H" / When K · SCAN4 is "H"
1	DATA1	I	DECK2 REC A SW input / DECK2 REC B SW input / DECK1 STOP SW input / SW CD HIGH SPEED (ON/OFF)
42	DATA2	I	DECK1 CST SW input / DECK2 CST SW input / DECK2 STOP SW input / SW CAL (Calibration ON/OFF)
41	DATA3	I	SW · POWER input / SW · DOLBYC (ON/OFF) / DECK1/2 SW input
2	O · K · SCAN1	O	SCAN output terminal of DATA 1~3.
3	O · K · SCAN2	O	
4	O · K · SCAN3	O	
5	I · REMOTE	I	Serial data input terminal of remote controller.
6	O · LMT	O	Output terminal for record/playback monitor output signal muting. "H" at muting.
7	O · POWER	O	POWER ON/OFF control.
8	O · BIAS	O	Bias oscillation output terminal for DECK 2. "H" at recording/dubbing. "L" at resetting.
9	O · $\overline{STB}$ ($\overline{CS}$)	O	Strobe signal for the shift register (IC, BU4094).
10	O · DATA (SO) / K · SCAN4	O	Serial data for the shift register PLL IC.
11	O · CLK	O	Serial data clock signal for the shift register PLL IC.
12	O · PB2	O	Playback output control terminal for DECKS 1 and 2. "H" at playback with DECK 2.
13	I · AUTO1	I	Reel pulse input terminal for DECK 1.
14	I · AUTO2	I	Reel pulse input terminal for DECK 2.
15	I · MS	I	MS signal input terminal. Active "H".
16	NC	–	Not used.
17	O · PLAY	O	Cue/review mute output and MS sensitivity switching output terminal. "H" at playback.
18	O · $\overline{RMT}$	O	Muting output terminal for recording input. "H" at record mute, record start, record clear and record pause.
19	TEST	–	MPU test terminal. Connected with Vss.
20	VSS	–	Common terminal for MPU I/O and power supply.
21	OSC1	–	3.9MHz Oscillation terminal
22	OSC2	–	
23	$\overline{RESET}$	I	Reset input terminal. Active "L".
24	O · $\overline{MOTOR}$	O	Main motor control output terminal for decks 1 and 2. "L" with both decks at STOP.
25	O · $\overline{SOL2}$	O	Solenoid drive output terminal for DECK 2. Active "L".
26	O · $\overline{SOL1}$	O	Solenoid drive output terminal for DECK 1. Active "L".
27	O · INT REC	O	Recording input source switching output terminal for deck 2. "H": Deck 1 at STOP, FF or REW (with DECK NOR, DECK HI, CD NOR, DECK2 REC). "L": In other modes: Deck 2 at REC, etc. (with CD HI, DECK2 PLAY/STOP, DECK1 PLAY).
28	I/O · $\overline{SERIAL}$	I/O	Input/output terminal for serial data with CD, AMPLIFIER and TUNER.
29	NC	–	Not used.
30	O · DOLBY ON	O	DOLBY NR ON/OFF switching output terminal. "H" at DOLBY NR ON.
31	O · REC	O	Dolby encoder/decoder switching output terminal. "H" at recording and "L" at dubbing.
32	O · HSP	O	High-speed control output terminal for DECKS 1 and 2. "H" at HIGH SPEED DUBBING.

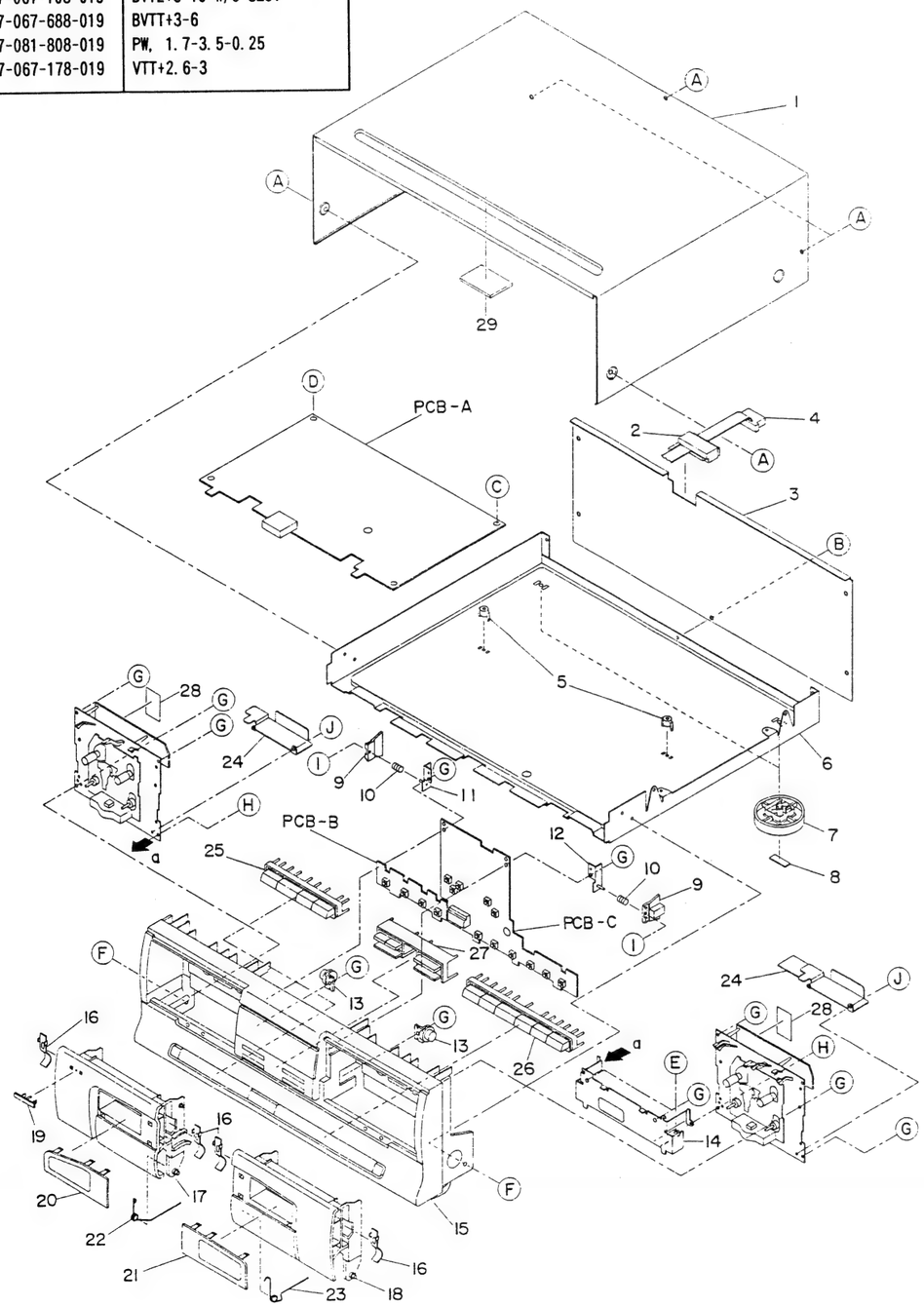
Pin No.	Pin Name	I/O	Description
33	NC	–	Not used.
34			
35			
36			
37			
38	I · AD2	I	Key function control input terminal.
39	I · AD1	I	
40	VDD	–	Power terminal (+5V).

IC, CXP2201AS

Pin No.	Pin Name	I/O	Description
1	EXT	I	Ceramic connector for system clock oscillator use. When using an external clock, input to EXT, and leave XT open.
2	$\overline{XT}$	O	
3	Vss	–	Connect to Vss.
4 ~ 7	NC	–	Not used.
8	VDD	–	Connect to VDD.
9 ~ 15	P1 ~ P7	O	Exclusive segment output (with built-in pull-down resistor).
16 ~ 25	NC	–	Not used.
26 ~ 32	G7 ~ G1	O	Exclusive timing output (with built-in pull-down resistor).
33	VFDP	–	Load power supply for FDP.
34 ~ 38	NC	–	Not used.
39	SI	I	Serial data input.
40	CLK	I	Shift clock input.
41	$\overline{CS}$	I	Chip select input.
42	$\overline{RST}$	I/O	Reset (with built-in pull-up resistor and power-on reset circuit).

EXPLODED VIEW – 1 (FX – WZ7000)

REF.	PART NO.	DESCRIPTION
A	87-743-094-419	UT2+3-6 W/O SLOT BLK
B	87-067-660-019	BVT2+3-8 W/O SLOT BLK
C	87-067-758-019	BVT2+3-12 W/O SLOT
D	87-067-776-019	BVT2+3-12W CONVEX
E	87-067-584-019	BVT2+3-6
F	87-721-095-419	QT2+3-8 GLD W/O SLOT
G	87-067-703-019	BVT2+3-10 W/O SLOT
H	87-067-688-019	BVTT+3-6
I	87-081-808-019	PW, 1.7-3.5-0.25
J	87-067-178-019	VTT+2.6-3



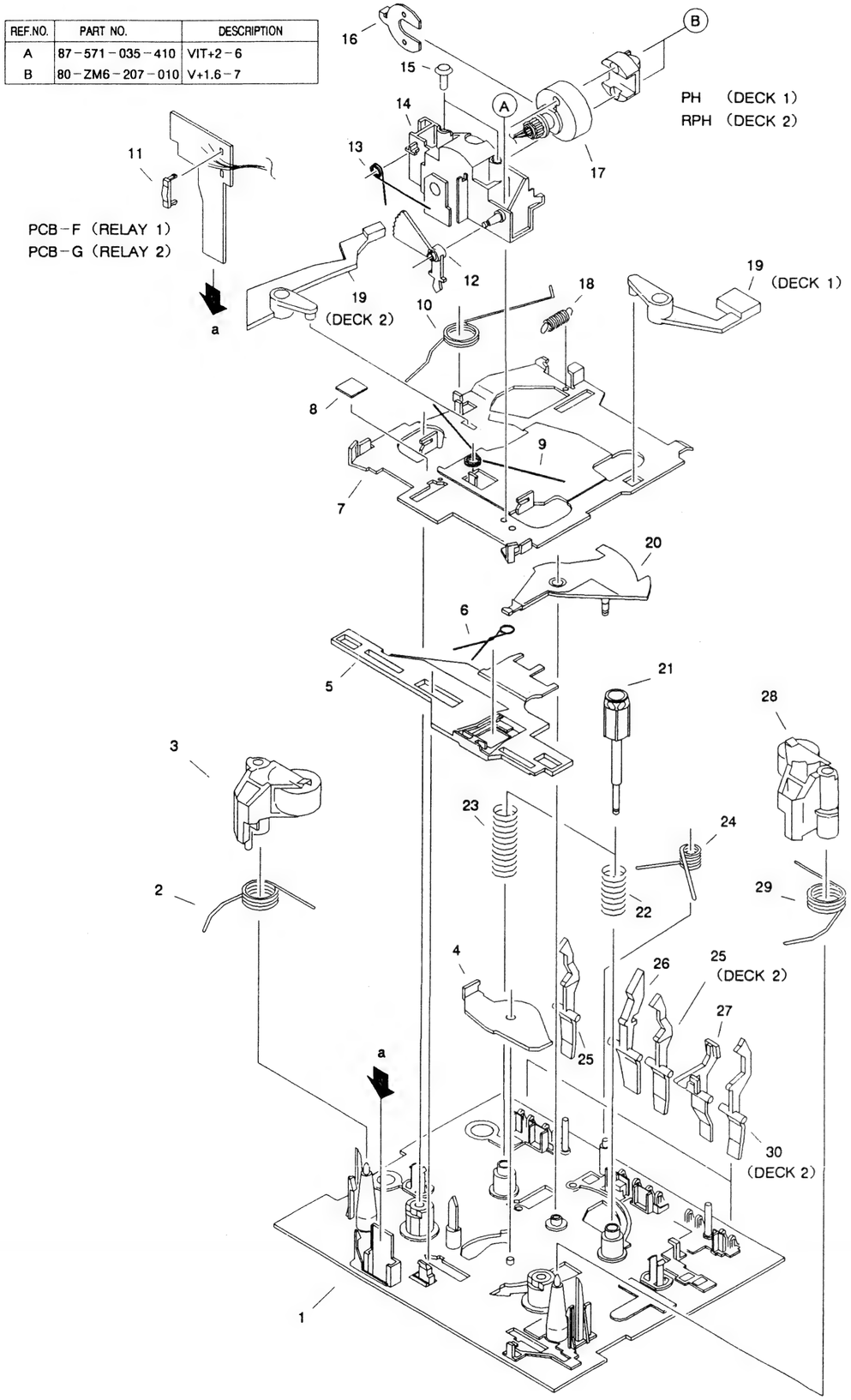
MECHANICAL PARTS LIST (FX – WZ7000)

DESCRIPTIONで判断できない物は "REFERENCE NAME LIST" を参照してください。
If can't understand for Description please kindly refer to "REFERENCE NAME LIST".

PART NO. CHANGED TO	REF. NO.	PART NO.	DESCRIPTION	COMMON MODEL	Q,TY
	1-1	★81-VW1-028-018	CAB, STEEL G (Y)	※	1
	1-1	★81-VW1-017-119	CAB, STEEL (YJ)	※	1
	1-2	★89-VT5-202-010	BUSHING, CORD		1
	1-3	★82-VW1-011-119	PANEL, REAR YBNE (Y)	※	1
	1-3	★82-VW1-010-019	PANEL, REAR YJBN (YJ)	※	1
	1-4	★82-VW2-623-019	CORD, FG 9P 750		1
	1-5	---	HLDR, PCB 6.0		2
	1-6	---	CHASSIS, AMP		1
	1-7	★81-VX1-012-019	FOOT, REAR		2
	1-8	★82-VW2-211-019	FELT 20 – 7.5 – 2		2
	1-9	★80-CD3-233-010	PLATE, LOCK		2
	1-10	★81-715-234-019	SPR – C, LOCK PLATE 5V		2
	1-11	★82-VW2-201-019	HLDR ASSY, LOCK 1		1
	1-12	★82-VW2-202-010	HLDR ASSY, LOCK 2		1
	1-13	★87-063-143-010	OIL – DMPR 75		2
	1-14	★82-VW2-207-019	HLDR, BOX		1
	1-15	★09-047-743-010	CAB, FR ASSY	※	1
	1-16	★81-MX4-223-019	SPR – P, CASS		4
	1-17	★82-VW1-008-219	BOX, CASS 1 EX	※	1
	1-18	★82-VW2-020-219	BOX, CASS 2 EX		1
	1-19	★81-DS1-011-019	BADGE, AIWA N		1
	1-20	★82-VW2-010-019	WINDOW, CASS 1		1
	1-21	★82-VW2-011-019	WINDOW, CASS 2		1
	1-22	★82-VW2-208-019	SPR – T, EJECT 1		1
	1-23	★82-VW2-209-019	SPR – T, EJECT 2		1
	1-24	★82-VW2-618-119	PLATE, SHLD MECHA		2
	1-25	★82-VW1-005-019	KEY, PLAY	※	1
	1-26	★82-VW1-006-019	KEY, REC	※	1
	1-27	★82-VW1-003-019	KEY, DUBB	※	1
	1-28	★80-MK2-206-010	DMPR, 27 – 44.5 – 5.3		2
	1-29	★82-226-274-010	DMPR, 80 – 60 – 3 (Y)		1

EXPLODED VIEW – 2 (FX – WZ7000)

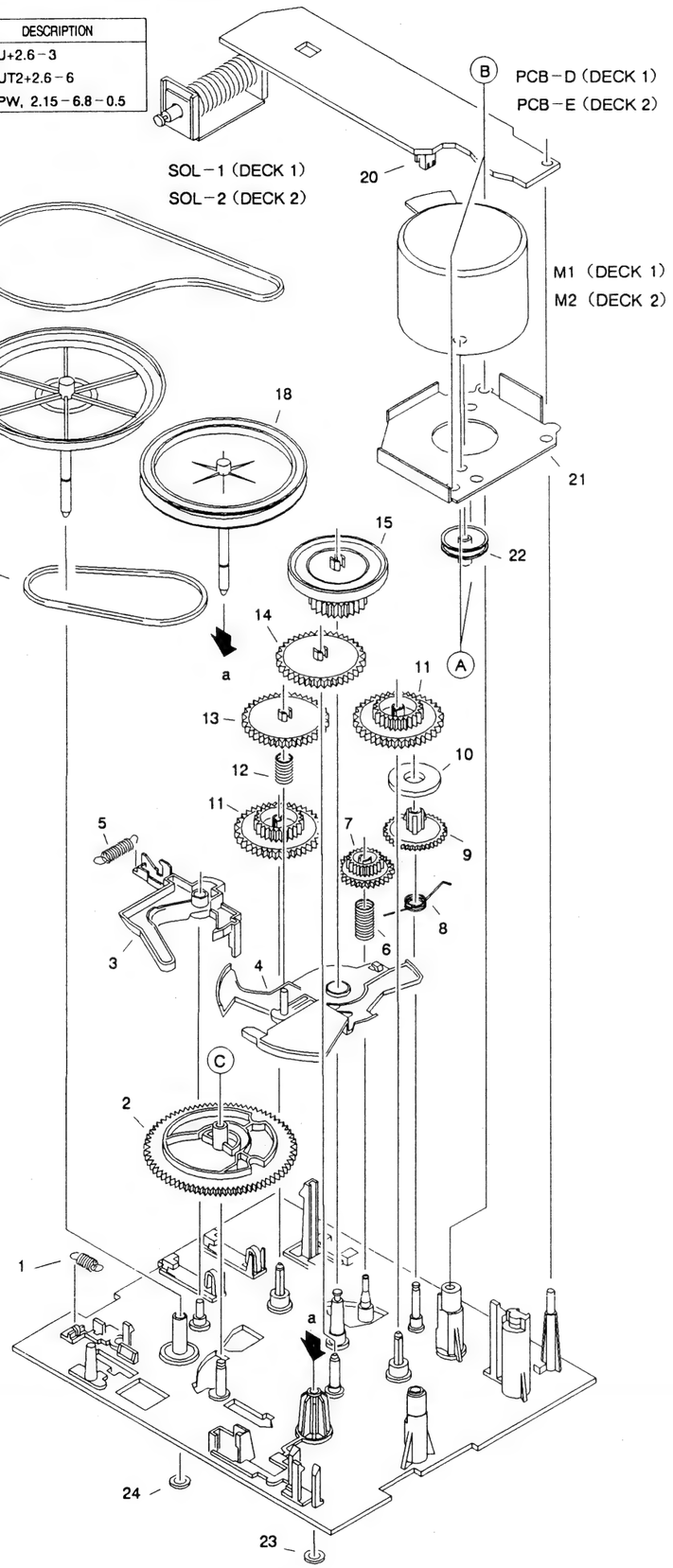
REF.NO.	PART NO.	DESCRIPTION
A	87–571–035–410	VIT+2–6
B	80–ZM6–207–010	V+1.6–7



PART NO. CHANGED TO	REF. NO.	PART NO.	DESCRIPTION	COMMON MODEL	Q.TY
	2-1	★82-ZM1-201-010	CHAS ASSY, MECH	※	1
	2-2	★82-ZM1-258-010	SPR – T, PINCH L	※	1
	2-3	★82-ZM1-248-110	LVR ASSY, PINCH L	※	1
	2-4	★82-ZM1-295-010	PLATE ASSY, LINK	※	1
	2-5	★82-ZM1-266-010	LVR, DIR	※	1
	2-6	★82-ZM1-214-010	SPR – T, DIR	※	1
	2-7	★82-ZM1-206-010	CHAS, HEAD	※	1
	2-8	★87-078-014-010	SH, 5 – 5 – 0.05		1
	2-9	★82-ZM1-269-010	SPR – T, BRG	※	1
	2-10	★82-ZM1-219-010	SPR – T, LINK	※	1
	2-11	- - -	HLDR WIRE 2		1
	2-12	★82-ZM1-210-010	GEAR, H T	※	1
	2-13	★82-ZM1-213-010	SPR – T, HEAD	※	1
	2-14	★82-ZM1-207-010	GUIDE, TAPE	※	1
	2-15	★82-ZM1-283-010	S – SCREW, AZIMUTH	※	2
	2-16	★82-ZM1-209-010	PLATE, HEAD	※	1
	2-17	★82-ZM1-208-010	HLDR, HEAD	※	1
	2-18	★82-ZM1-218-010	SPR – E, HB	※	1
	2-19	★82-ZM1-264-010	LVR, EJECT R (DECK 1)	※	1
	2-19	★82-ZM1-263-010	LVR, EJECT L (DECK 2)	※	1
	2-20	★82-ZM1-222-010	LVR, PLAY	※	1
	2-21	★82-ZM1-217-010	REEL TABLE	※	2
	2-22	★82-ZM1-244-010	SPR – C, BT	※	1
	2-23	★82-ZM1-285-010	SPR – C, BT L	※	1
	2-24	★82-ZM1-257-010	SPR – T, CAS	※	1
	2-25	★82-ZM1-241-010	LVR, MC (DECK 1)	※	1
			(DECK 2)	※	2
	2-26	★82-ZM1-242-010	LVR, CAS	※	1
	2-27	★82-ZM1-243-010	LVR, STOP	※	1
	2-28	★82-ZM1-253-110	LVR ASSY, PINCH R	※	1
	2-29	★82-ZM1-259-010	SPR – T, PINCH R	※	1
	2-30	★82-ZM1-240-010	LVR, REC (DECK 2)	※	2

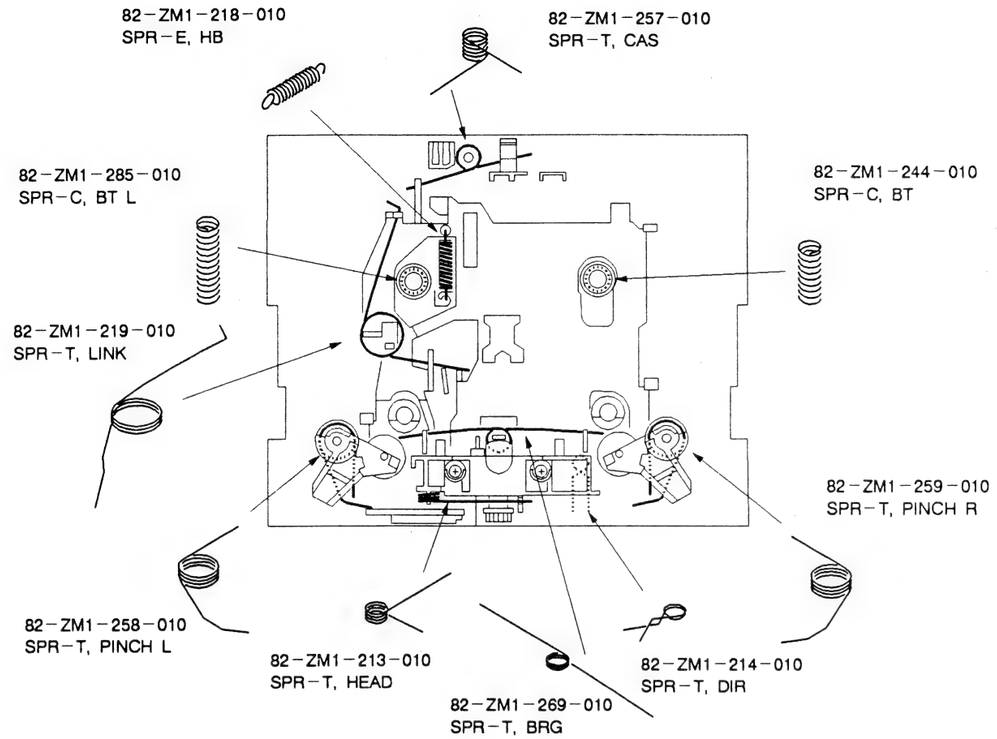
EXPLODED VIEW – 3 (FX – WZ7000)

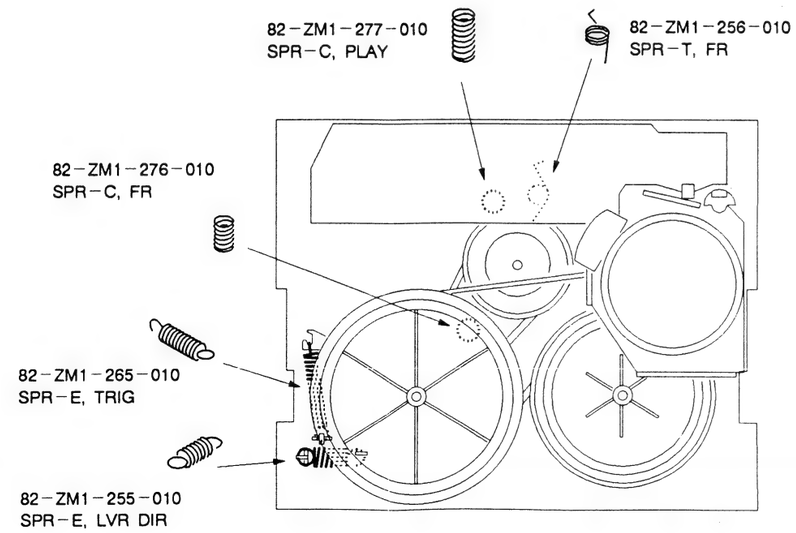
REF.NO.	PART NO.	DESCRIPTION
A	87 – 251 – 070 – 410	U+2.6 – 3
B	87 – 741 – 073 – 410	UT2+2.6 – 6
C	87 – 067 – 932 – 010	PW, 2.15 – 6.8 – 0.5



PART NO. CHANGED TO	REF. NO.	PART NO.	DESCRIPTION	COMMON MODEL	Q,TY
	3-1	★82-ZM1-255-010	SPR – E, LVR DIR	※	1
	3-2	★82-ZM1-221-010	GEAR, CAM	※	1
	3-3	★82-ZM1-227-010	LVR, TRIG	※	1
	3-4	★82-ZM1-224-010	LVR, FR	※	1
	3-5	★82-ZM1-265-010	SPR – E, TRIG	※	1
	3-6	★82-ZM1-277-010	SPR – C, PLAY	※	1
	3-7	★82-ZM1-223-010	GEAR, PLAY	※	1
	3-8	★82-ZM1-256-010	SPR – T, FR	※	1
	3-9	★82-ZM1-220-010	GEAR, IDLER	※	1
	3-10	★80-ZM6-217-010	RING MAGNET 2		1
	3-11	★82-ZM1-216-010	GEAR, REEL	※	2
	3-12	★82-ZM1-276-010	SPR – C, FR	※	1
	3-13	★82-ZM1-225-010	GEAR, FR	※	1
	3-14	★82-ZM1-226-010	GEAR, REW	※	1
	3-15	★82-ZM1-228-010	SLIP DISK ASSY	※	1
	3-16	★82-ZM1-261-010	BELT, FR	※	1
	3-17	82-ZM1-237-010	FLY – WHL ASSY, R	※	1
	3-18	82-ZM1-234-010	FLY – WHL ASSY, L	※	1
	3-19	★82-ZM1-260-010	BELT, MAIN	※	1
	3-20	★82-ZM1-245-010	HLDR, IC	※	1
	3-21	★82-ZM1-246-010	HLDR, MOTOR	※	1
	3-22	★82-ZM1-247-010	PULLEY, MOTOR	※	1
	3-23	★82-ZM1-288-010	SH, 1.63 – 3.2 – 0.5 SLT	※	1
	3-24	★80-ZM6-243-010	SH, 1.75 – 3.6 – 0.5 SLT		1

SPRING APPLICATION POSITION (FX – WZ7000)





MODEL NO.

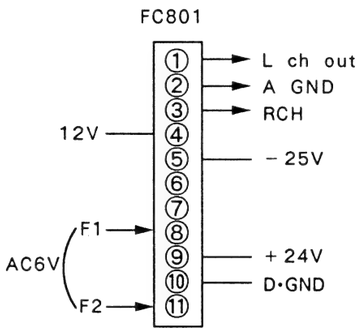
TX – Z7000

CAUTIONS WHEN SERVICING (TX – Z7000)

Model TX – Z7000 does no have a power supply circuit. Power is supplied to it through a 11 – pin flat cable and the signal inputs/outputs are also perfomed through this cable.
When servicing the TX – Z7000 connect it to the MX – Z7000M so that power is supplied to the TX – Z7000.
If the MX – Z7000M is not available, follow the procedure below.

[When servicing the unassembled TX – Z7000]

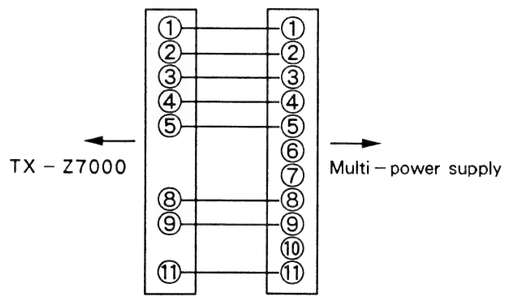
① Supply the following voltages to each terminal from an external power supply.

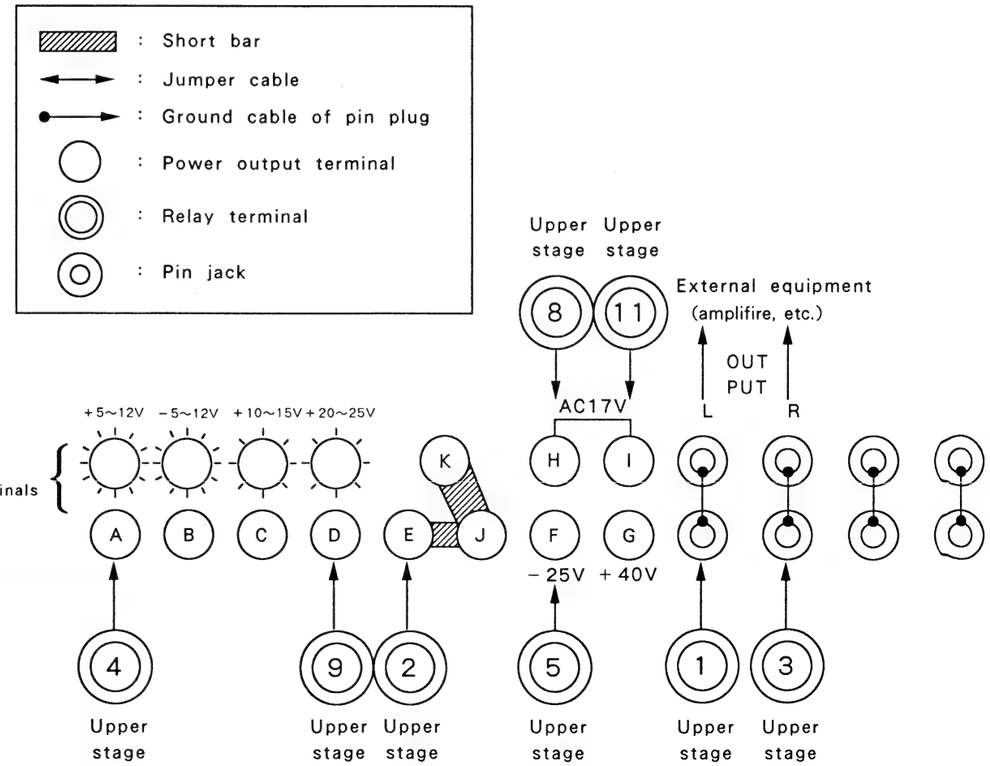


② Connection diagram when using multi power supply (LPS – 9088).

- Turn the TX – Z7000 on using the SLEEP function since the POWER SW is not supplied.
- Connect the multi – conversion harness for the X5 type (modeified harness for F550) to J1.

Connection diagram of multi – conversion harness





ELECTRICAL MAIN PARTS LIST (TX－Z7000)

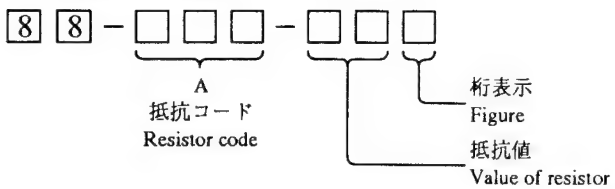
DESCRIPTIONで判断できない物は "REFERENCE NAME LIST" を参照してください。
If can't understand for Description please kindly refer to "REFERENCE NAME LIST".

REF. NO	PART NO.	ｶﾝﾘ NO.	DESCRIPTION
IC			
	87-001-376-010		IC, LC7218
	87-001-942-010		IC, LA1265S(G)
	87-020-446-010		IC, TA7343AP
	81-VT1-610-010		IC, UPD75268CW-029
TRANSISTOR			
	89-502-094-080		C-FET, 2SK209Y
	89-502-115-080		C-FET, 2SK211GR(YE, YZ)
	89-503-025-080		C-FET, 2SK302GR
	89-327-143-080		C-TR, 2SC2714(O)
	89-316-235-080		C-TR, 2SC1623J5
	89-327-125-080		C-TR, 2SC2712GR
	89-333-266-080		C-TR, 2SC3326B
	87-026-230-080		C-TR, DTA114YK
	89-110-485-080		TR, 2SA1048GR
	89-318-155-080		TR, 2SC1815GR
	89-320-011-080		TR, 2SC2001K
	89-324-585-080		TR, 2SC2458GR
	87-026-214-080		TR, DTA114YS
DIODE			
	87-020-125-080		C-DIODE, 1SS181
	87-020-027-080		C-DIODE, 1SS184
	87-026-360-080		C-VARICAP, KV1430(YLH, YH, YZ)
	87-026-360-010		C-VARICAP, KV1430(YE)
	87-020-583-080		C-ZENER, 02CZ5.1Y
	87-020-585-080		C-ZENER, 02CZ6.2Y
	87-020-110-080		DIODE, 1SS177
	81-754-634-090		VARI-CAP, KV1260(YE, YZ)
	87-027-449-080		ZENER, HZ15-3L
	87-017-172-080		ZENER, HZS11A1L
MAIN C.B			
	81-MT3-655-010		AM PACK 1, S(YLH, YH)
	81-689-212-010		PLATE, EARTH
C1	87-010-312-080		C-CAP, S 15P-50 CH
C2	87-015-819-080		C-CAP, 0.01
C3	87-010-197-080		C-CAP, S 0.01-25 B
C4	87-010-197-080		C-CAP, S 0.01-25 B
C5	87-010-197-080		C-CAP, S 0.01-25 B
C6	87-010-197-080		C-CAP, S 0.01-25 B
C7	87-010-147-080		C-CAP, S 3P-50 CH(YZ)
C7	87-010-150-080		C-CAP, S 6P-50 CH(YLH, YH, YE)
C8	87-018-102-080		CAP, TC-U 6.8P-50 SL(YLH, YH, YE)
C9	87-010-158-080		C-CAP, S 22P-50 SL
C10	87-010-154-080		C-CAP, S 10P-50 CH
C11	87-010-312-080		C-CAP, S 15P-50 CH
C12	87-010-312-080		C-CAP, S 15P-50 CH
C13	87-010-197-080		C-CAP, S 0.01-25 B
C14	87-010-146-080		C-CAP, S 2P-50 CH
C15	87-010-145-080		C-CAP, S 1P-50 CH(YLH, YH, YE)
C15	87-010-148-080		C-CAP, S 4P-50 CH(YZ)
C16	87-010-154-080		C-CAP, S 10P-50 CH(YLH, YH, YE)
C16	87-010-149-080		C-CAP, S 5P-50 CH(YZ)
C17	87-010-197-080		C-CAP, S 0.01-25 B
C18	87-010-170-080		C-CAP, S 220P-50 SL
C19	87-010-197-080		C-CAP, S 0.01-25 B
C20	87-010-197-080		C-CAP, S 0.01-25 B
C21	87-010-197-080		C-CAP, S 0.01-25 B
C22	87-010-400-080		CAP, E 0.47-50 SME
C23	87-010-197-080		C-CAP, S 0.01-25 B
C24	87-010-149-080		C-CAP, S 5P-50 CH
C25	87-010-197-080		C-CAP, S 0.01-25 B(YLH, YH, YE)
C26	87-010-312-080		C-CAP, S 15P-50 CH
C27	87-010-197-080		C-CAP, S 0.01-25 B
C30	87-010-401-080		CAP, E 1-50 SME
C31	87-010-197-080		C-CAP, S 0.01-25 B
C32	87-010-197-080		C-CAP, S 0.01-25 B
C33	87-010-405-080		CAP, E 10-50 SME
C34	87-010-166-080		C-CAP, S 100P-50 SL
C35	87-010-197-080		C-CAP, S 0.01-25 B
C36	87-010-401-080		CAP, E 1-50 SME
C37	87-010-404-080		CAP, E 4.7-50 SME
C38	87-010-405-080		CAP, E 10-50 SME
C39	87-010-544-080		CAP, E 0.1-50
C40	87-010-403-080		CAP, E 3.3-50 SME
C41	87-010-404-080		CAP, E 4.7-50 SME
C42	87-010-404-080		CAP, E 4.7-50 SME(YZ)
C43	87-010-197-080		C-CAP, S 0.01-25 B
C45	87-010-404-080		CAP, E 4.7-50 SME
C46	87-010-197-080		C-CAP, S 0.01-25 B
C47	87-010-197-080		C-CAP, S 0.01-25 B
C48	87-010-197-080		C-CAP, S 0.01-25 B
C49	87-010-197-080		C-CAP, S 0.01-25 B
C50	87-010-197-080		C-CAP, S 0.01-25 B
C51	87-010-197-080		C-CAP, S 0.01-25 B
C52	87-010-197-080		C-CAP, S 0.01-25 B(YE, YZ)
C53	87-010-196-080		C-CAP, S 0.1-25 F
C54	87-010-197-080		C-CAP, S 0.01-25 B(YE, YZ)
C55	87-014-049-080		CAP, PP 470P-100 J(YE, YZ)
C56	87-010-158-080		C-CAP, S 22P-50 SL(YE, YZ)
C56	87-010-152-080		C-CAP, S 8P-50 CH(YLH, YH)
C57	87-010-169-080		C-CAP, S 180P-50 SL(YE, YZ)
C58	87-014-050-080		CAP, PP 510P-100 J(YE, YZ)
C60	87-010-404-080		CAP, E 4.7-50 SME(YZ)
C61	87-010-401-080		CAP, E 1-50 SME
C62	87-010-403-080		CAP, E 3.3-50 SME
C63	87-014-057-080		CAP, PP 1000P-100 J
C64	87-010-405-080		CAP, E 10-50 SME
C67	87-010-220-080		C-CAP, S 0.018-25 B
C68	87-010-220-080		C-CAP, S 0.018-25 B
C69	87-010-404-080		CAP, E 4.7-50 SME
C70	87-010-404-080		CAP, E 4.7-50 SME
C73	87-010-404-080		CAP, E 4.7-50 SME
C74	87-010-404-080		CAP, E 4.7-50 SME
C75	87-010-248-080		CAP, E 220-10 SME
C76	87-010-312-080		C-CAP, S 15P-50 CH
C77	87-010-197-080		C-CAP, S 0.01-25 B
C78	87-010-197-080		C-CAP, S 0.01-25 B
C79	87-010-197-080		C-CAP, S 0.01-25 B
C80	87-010-384-080		CAP, E 100-25 SME
C81	87-010-186-080		C-CAP, S 4700P-50 B
C82	87-010-400-080		CAP, E 0.47-50 SME
C83	87-015-762-080		C-CAP, 68P SL
C84	87-010-164-080		C-CAP, S 68P-50 SL
C85	87-010-164-080		C-CAP, S 68P-50 SL
C86	87-018-134-080		CAP, TC-U 0.01-16 Y
C87	87-010-263-080		CAP, E 100-10(YLH, YH, YE)
C87	87-010-404-080		CAP, E 4.7-50 SME(YZ)
C88	87-010-381-080		CAP, E 330-16 SME
C100	87-010-197-080		C-CAP, S 0.01-25 B
C101	87-010-197-080		C-CAP, S 0.01-25 B
C102	87-010-311-080		C-CAP, S 12P-50 CH(YE, YZ)
C103	87-010-197-080		C-CAP, S 0.01-25 B(YE)
C103	87-010-311-080		C-CAP, S 12P-50 CH(YZ)
C104	87-010-197-080		C-CAP, S 0.01-25 B(YZ)
C106	87-010-145-080		C-CAP, S 1P-50 CH(YZ)
C110	87-010-263-080		CAP, E 100-10
C111	87-010-405-080		CAP, E 10-50 SME
C112	87-010-401-080		CAP, E 1-50 SME
C781	87-010-197-080		C-CAP, S 0.01-25 B
CF1	87-030-105-010		FLTR, BPMB6A(YZ)
CF2	82-799-621-010		FLTR, SFE10.7MS2-A(YZ)
CF2	87-008-261-010		FLTR, SFE10.7MA5-A(YLH, YH, YE)
CF3	87-008-261-010		FLTR, SFE10.7MA5-A(YZ)
CF4	87-008-261-010		FLTR, SFE10.7MA5-A

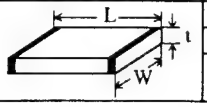
REF. NO	PART NO.	ｶﾝﾘ NO.	DESCRIPTION
CF5	82-794-670-010		BFU450C4N
J1	81-653-648-010		ANT TERM EARTH PAL〈YE, YZ〉
J1	81-653-638-110		ANT TERMINAL EARTH〈YLH, YH〉
J1	81-631-646-010		ANT TERM 2P PAL〈YE, YZ〉
J1	87-033-214-010		ANT TERM 4P(JT)〈YLH, YH〉
J2	81-754-629-010		CONNECTOR XH M 2P (UL)〈YE〉
L1	87-006-209-010		COIL, ANT FM 3/4 T
L2	87-006-210-010		COIL, ANT FM 2 3/4T
L3	87-006-200-010		COIL, RF FM 3-1/2T, L5
L4	87-006-201-010		COIL, RF FM3-1/2TS, L5
L5	87-006-201-010		COIL, RF FM3-1/2TS, L5〈YZ〉
L6	87-006-205-010		COIL, OSC FM(7K)
L7	87-003-231-080		C-COIL, S1UH
L8	87-008-427-010		COIL, FMIFT(4T)
L9	81-631-611-010		COIL, QUAD(SINGLE)
L11	87-008-452-010		FILTER, CFAZ-450
L12	87-006-207-010		COIL, ANT MW (3B)〈YE, YZ〉
L13	87-006-208-010		COIL, ANT LW〈YE, YZ〉
L14	82-794-687-010		COIL, OSC〈YE, YZ〉
L15	87-008-461-010		COIL, 2POLE MPX
L16	87-008-461-010		COIL, 2POLE MPX
L17	82-794-688-010		COIL, OSC LW〈YE, YZ〉
L18	87-008-421-010		COIL, FILTER AMTI-BIRDIE〈YZ〉
L19	87-003-098-080		COIL, 2.2UH
SFR1	87-024-174-080		SFR, 33K DIA6 V
SFR2	87-024-171-080		SFR, 4.7K DIA6 V
TC1	87-011-219-080		CAP, TRIMMER 10P VCT
TC2	87-011-219-080		CAP, TRIMMER 10P VCT
TC3	87-011-219-080		CAP, TRIMMER 10P VCT〈YZ〉
TC4	87-011-220-080		CAP, TRIMMER 20P VCT〈YE, YZ〉
TC5	87-011-221-080		TRIMMER. 30P VCT51
TC6	87-011-221-080		TRIMMER. 30P VCT51〈YE, YZ〉
WH802	82-VT1-605-010		CORD, FG 11P
X1	87-030-163-010		VIB, XTAL 7.2MHZ(NDK)
FRONT C.B			
C901	87-018-131-080		CAP, TC-U 1000P-50 B
C902	87-010-553-080		CAP, E 47-16
C903	87-010-498-080		CAP, E 10-16 5L
C904	87-010-494-080		CAP, E GAS 1/50
C905	87-018-131-080		CAP, TC-U 1000P-50 B
C906	87-010-497-080		CAP, E 4.7-35 5L
C907	87-010-494-080		CAP, E GAS 1/50
C908	87-010-494-080		CAP, E GAS 1/50
C909	87-018-134-080		CAP, TC-U 0.01-16 Y
C910	87-010-252-080		CAP, E(TAPG) 1000-6.3V
C911	87-018-209-080		CAP, TC-U 0.1-50 F
C912	87-018-209-080		CAP, TC-U 0.1-50 F
C913	87-018-209-080		CAP, TC-U 0.1-50 F
C915	87-010-381-080		CAP, E 330-16 SME
C916	87-010-381-080		CAP, E 330-16 SME
CF901	87-008-394-080		CF CST 4.19 MGW
FL901	80-VT1-608-010		FL, 9BT-83GK
L901	87-003-102-080		COIL, 10UH
L902	87-003-102-080		COIL, 10UH
L903	87-003-102-080		COIL, 10UH
L904	87-003-102-080		COIL, 10UH
RU901	87-002-669-010		IC, GP1U571X
SW901	87-036-215-080		SW, TACT EVQ21404M〈YLH, YH〉
SW901	87-036-259-080		SW, TACT SKHVBB〈YE, YZ〉
SW902	87-036-215-080		SW, TACT EVQ21404M〈YLH, YH〉
SW902	87-036-259-080		SW, TACT SKHVBB〈YE, YZ〉
SW903	87-036-215-080		SW, TACT EVQ21404M〈YLH, YH〉
SW903	87-036-259-080		SW, TACT SKHVBB〈YE, YZ〉
SW904	87-036-215-080		SW, TACT EVQ21404M〈YLH, YH〉
SW904	87-036-259-080		SW, TACT SKHVBB〈YE, YZ〉
SW905	87-036-215-080		SW, TACT EVQ21404M〈YLH, YH〉
SW905	87-036-259-080		SW, TACT SKHVBB〈YE, YZ〉
SW906	87-036-215-080		SW, TACT EVQ21404M〈YLH, YH〉
SW906	87-036-259-080		SW, TACT SKHVBB〈YE, YZ〉
SW907	87-036-215-080		SW, TACT EVQ21404M〈YLH, YH〉
SW907	87-036-259-080		SW, TACT SKHVBB〈YE, YZ〉
SW908	87-036-215-080		SW, TACT EVQ21404M〈YLH, YH〉
SW908	87-036-259-080		SW, TACT SKHVBB〈YE, YZ〉
SW909	87-036-215-080		SW, TACT EVQ21404M〈YLH, YH〉
SW909	87-036-259-080		SW, TACT SKHVBB〈YE, YZ〉
SW910	87-036-215-080		SW, TACT EVQ21404M〈YLH, YH〉
SW910	87-036-259-080		SW, TACT SKHVBB〈YE, YZ〉
SW911	87-036-215-080		SW, TACT EVQ21404M〈YLH, YH〉
SW911	87-036-259-080		SW, TACT SKHVBB〈YE, YZ〉
SW912	87-036-215-080		SW, TACT EVQ21404M〈YLH, YH〉
SW912	87-036-259-080		SW, TACT SKHVBB〈YE, YZ〉
SW913	87-036-215-080		SW, TACT EVQ21404M〈YLH, YH〉
SW913	87-036-259-080		SW, TACT SKHVBB〈YE, YZ〉
SW914	87-036-215-080		SW, TACT EVQ21404M〈YLH, YH〉
SW914	87-036-259-080		SW, TACT SKHVBB〈YE, YZ〉
SW915	87-036-215-080		SW, TACT EVQ21404M〈YLH, YH〉
SW915	87-036-259-080		SW, TACT SKHVBB〈YE, YZ〉
SW916	87-036-215-080		SW, TACT EVQ21404M〈YLH, YH〉
SW916	87-036-259-080		SW, TACT SKHVBB〈YE, YZ〉
SW917	87-036-215-080		SW, TACT EVQ21404M〈YLH, YH〉
SW917	87-036-259-080		SW, TACT SKHVBB〈YE, YZ〉
SW918	87-036-215-080		SW, TACT EVQ21404M〈YLH, YH〉
SW918	87-036-259-080		SW, TACT SKHVBB〈YE, YZ〉

○チップ抵抗部品コード／CHIP RESISTOR PART CODE

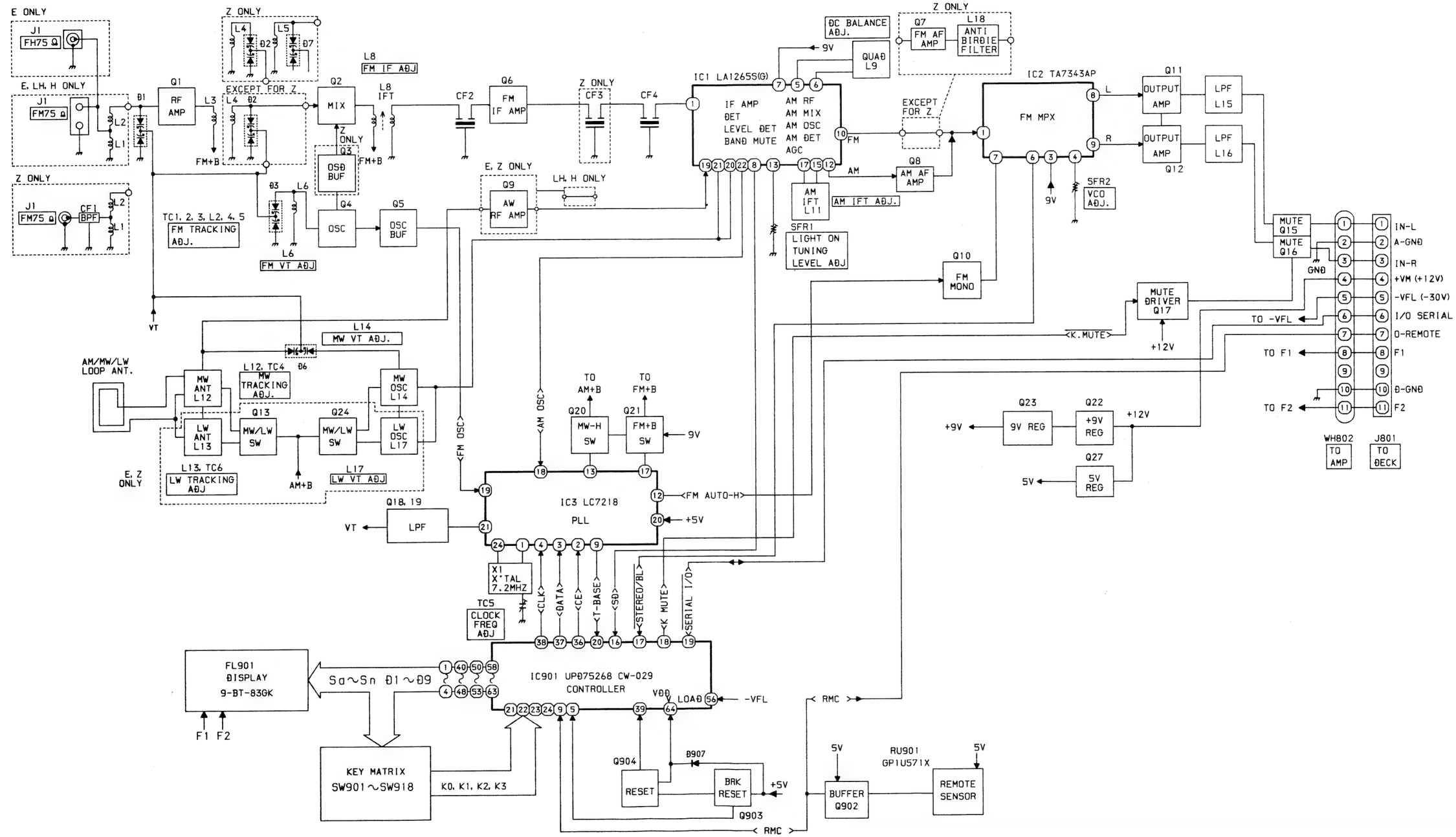
チップ抵抗部品コードの成り立ち
Chip resistor part coding



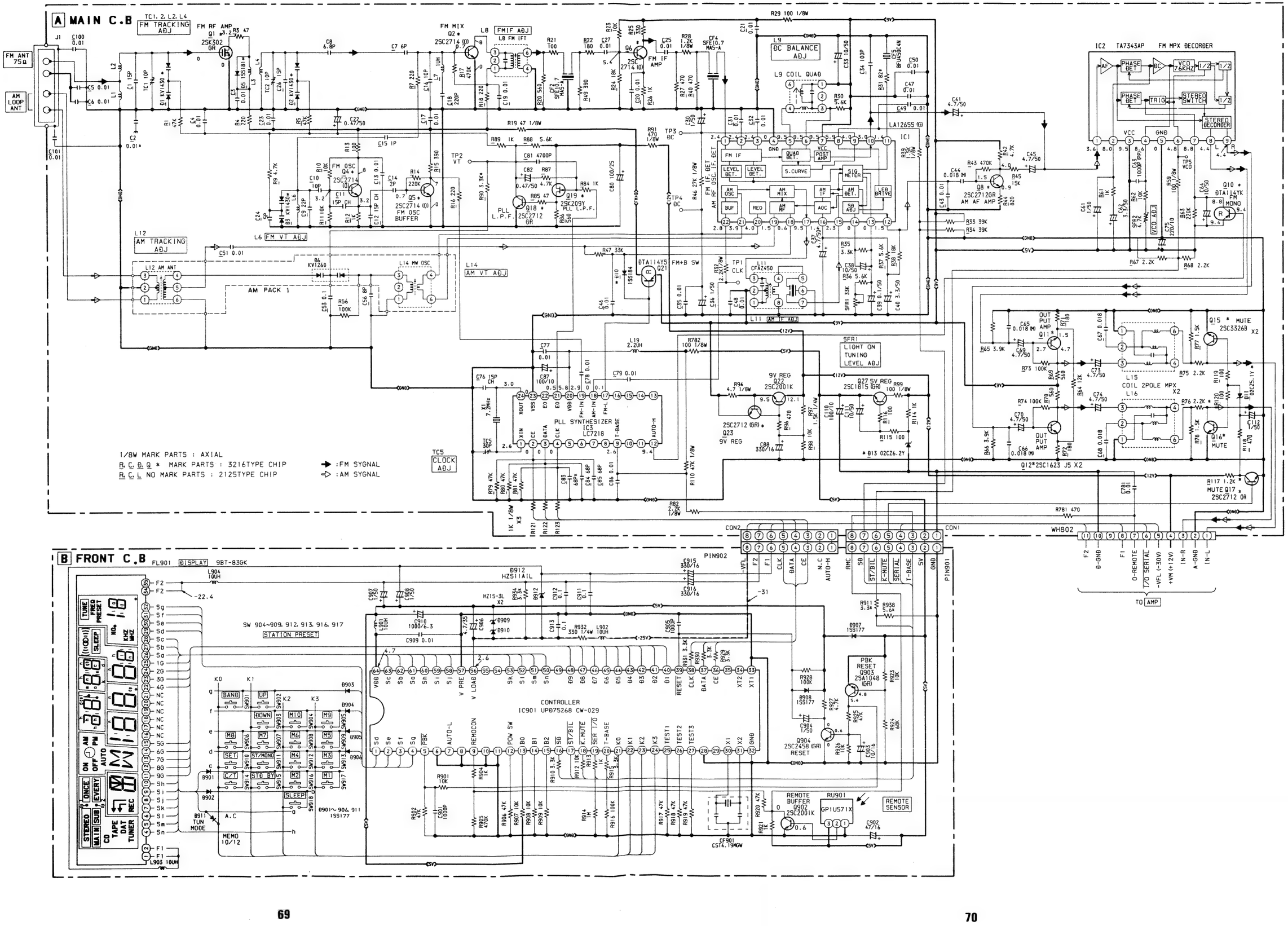
チップ抵抗
Chip resistor

Wattage 容量	Type 種類	Tolerance 許容誤差	Symbol 記号	Dimensions／寸法 (mm) Form/外形	L	W	t	Resistor code : A 抵抗コード : A
1/32W	1608	±5%	CJ		1.6	0.8	0.35	108
1/10W	2125	±5%	CJ		2	1.25	1.45	118
1/8W	3216	±5%	CJ		3.2	1.6	0.5 ~0.7	128

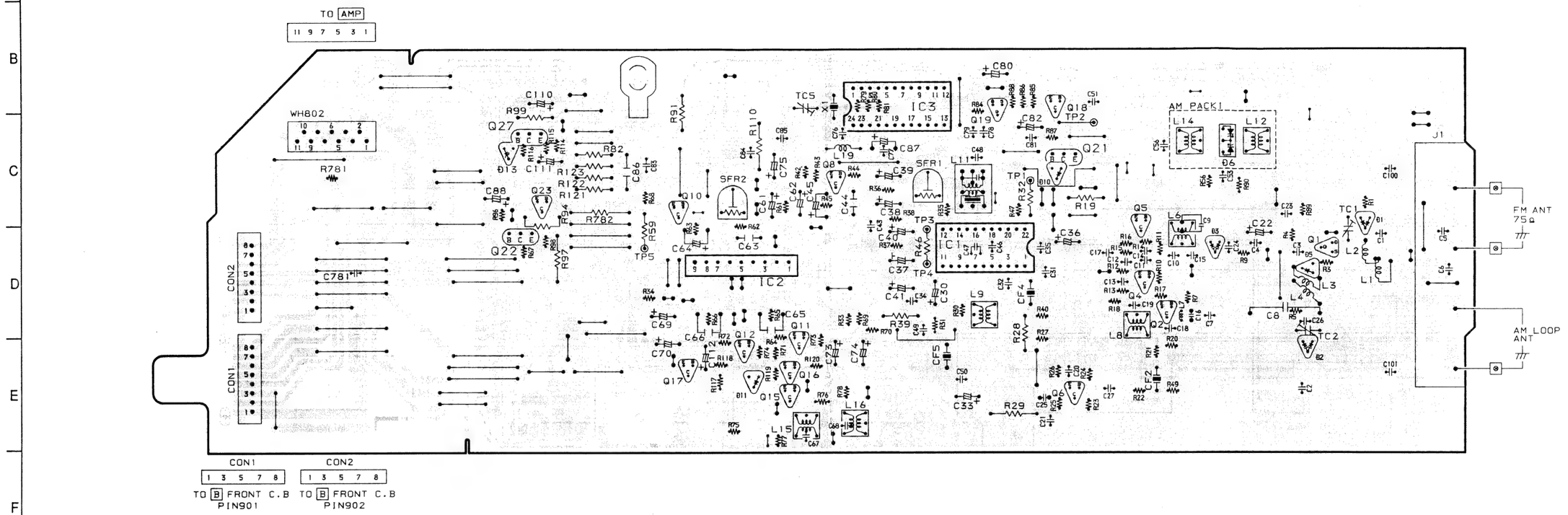
BLOCK DIAGRAM (TX – Z7000)



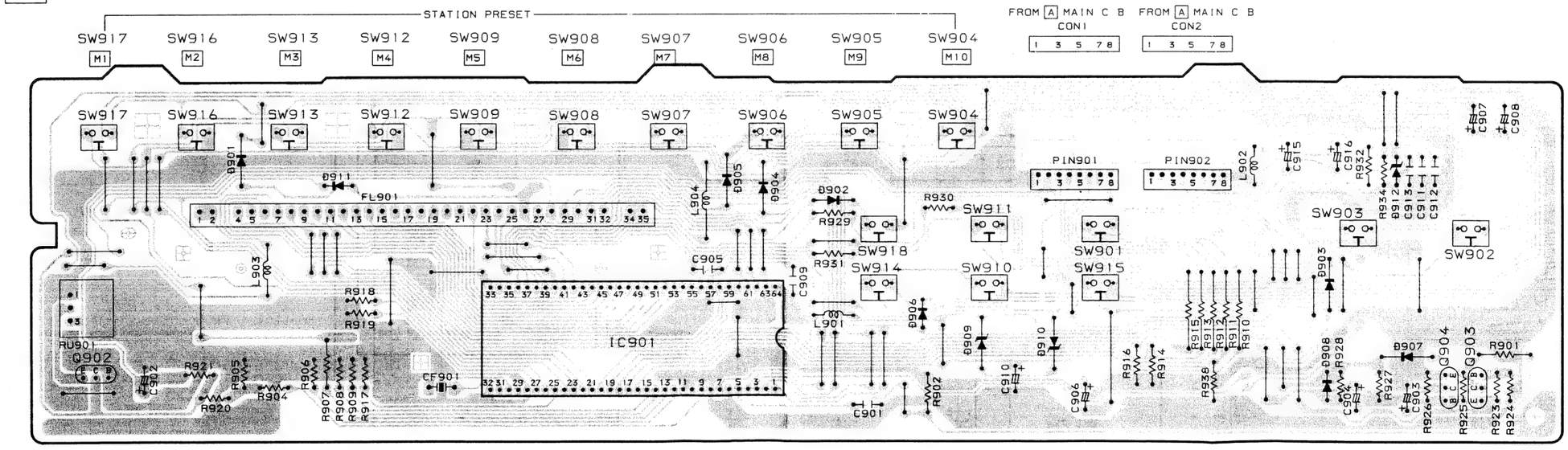
SCHEMATIC DIAGRAM – 1 (TX – Z7000H)



A MAIN C.B



B FRONT C.B



GRAPHIC SYMBOLS PRINTED CIRCUIT BOARD OF ELECT. CAP. ARE DESIGNED AS NEGATIVE POLE.

(プリント基板内のケミコンの極性表示はθ表示です。)

FL901
DISPLAY

SW918
SLEEP

SW911
ST/MOMO

SW901
BANθ

SW914
CLOCK/TIMER

SW910
SET

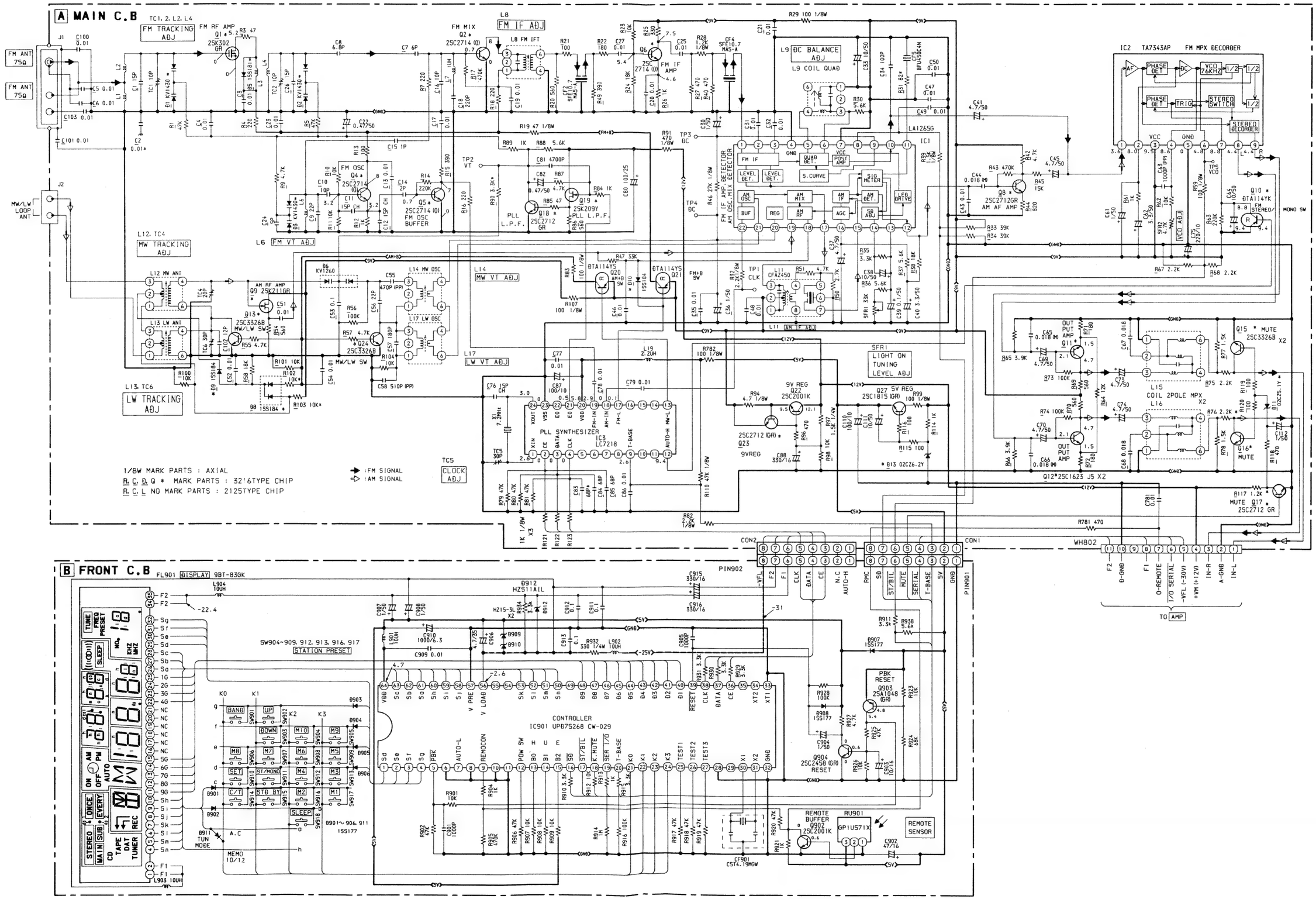
SW915
STANθBY

SW903
θDOWN

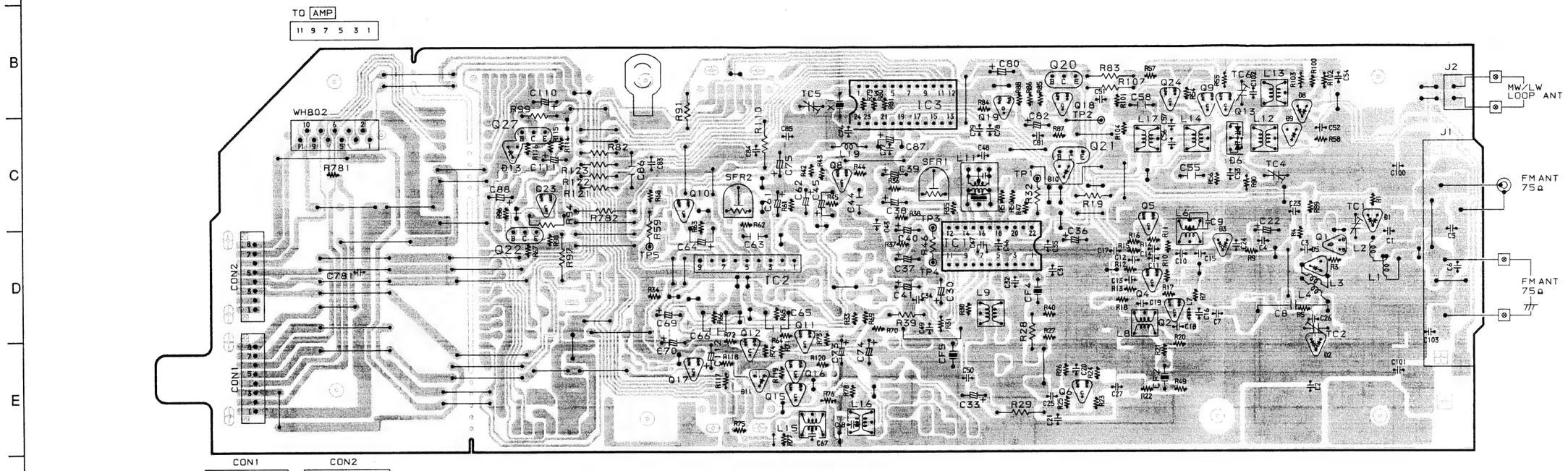
SW902
UP

TUNING/TIMER

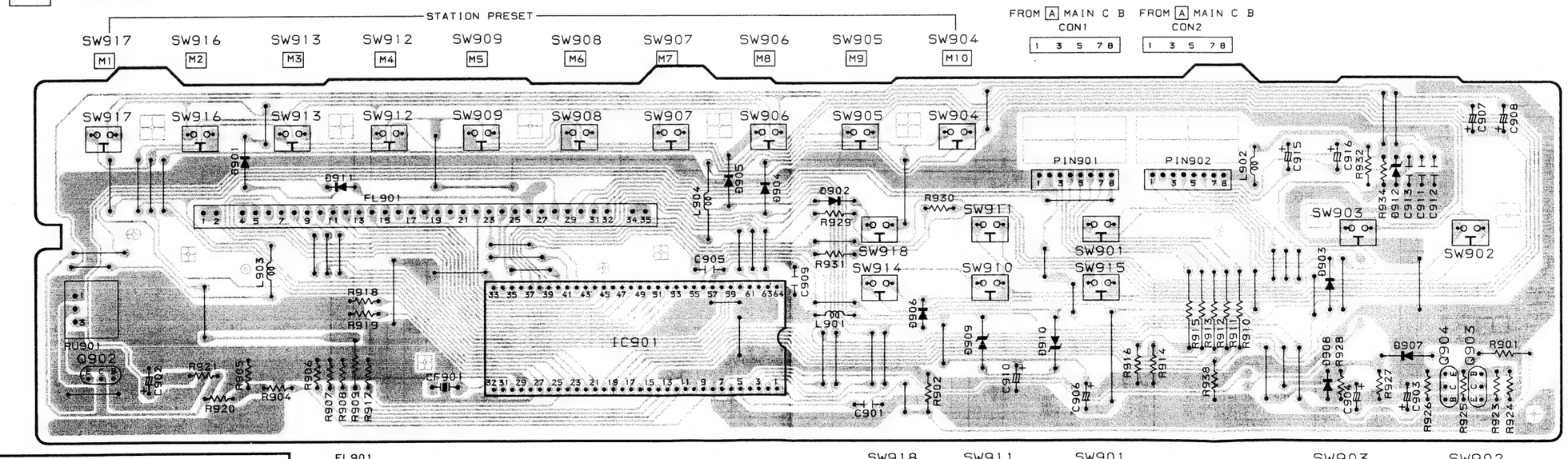
SCHEMATIC DIAGRAM – 2 (TX – Z7000 E)



A MAIN C.B



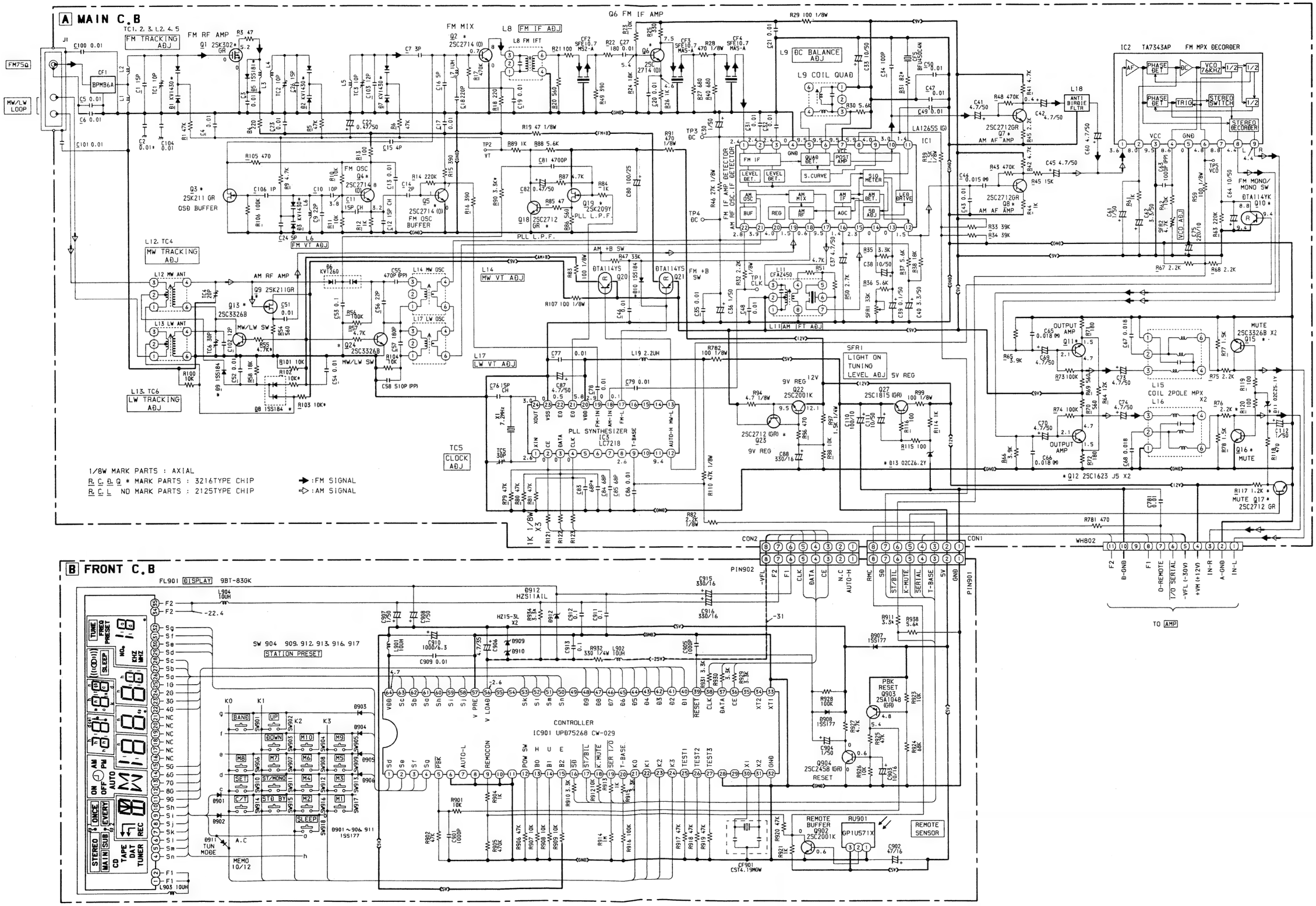
B FRONT C.B



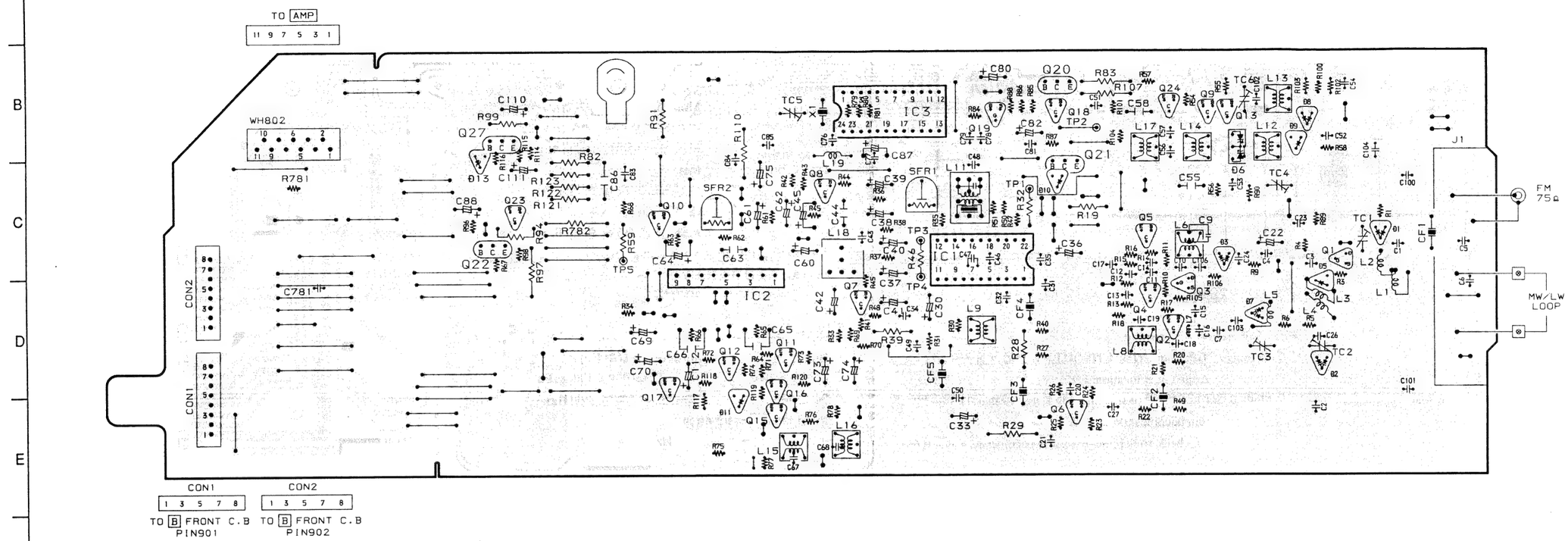
GRAPHIC SYMBOLS PRINTED CIRCUIT BOARD OF ELECT. CAP. ARE DESIGNED AS NEGATIVE POLE.

(プリント基板内のケミコンの極性表示はθ表示です。)

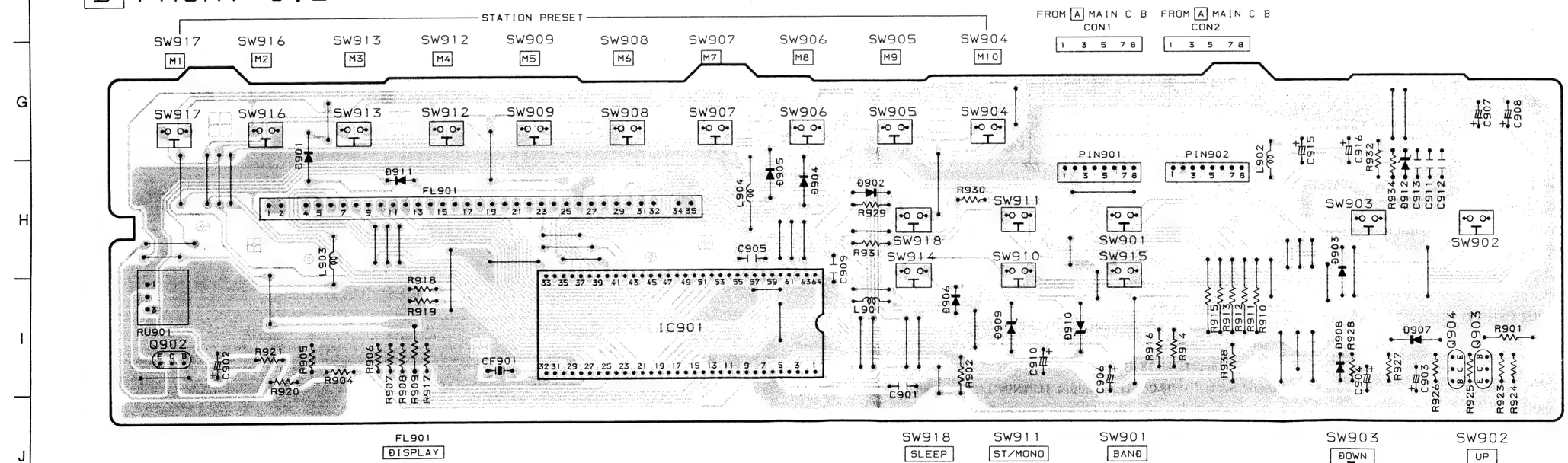
SCHEMATIC DIAGRAM – 3 (TX – Z7000Z)



A MAIN C.B



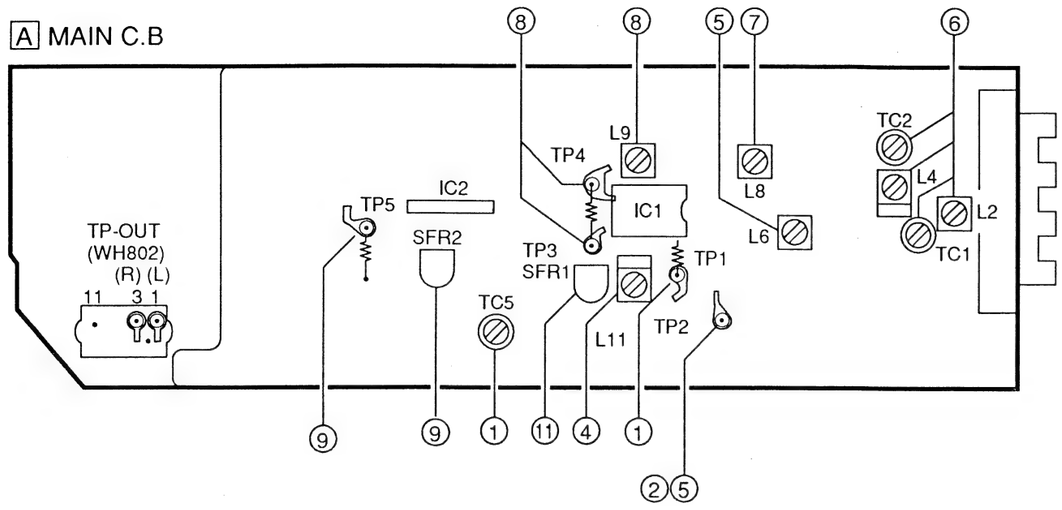
B FRONT C.B



GRAPHIC SYMBOLS PRINTED CIRCUIT BOARD OF ELECT. CAP. ARE DESIGNED AS NEGATIVE POLE.

(プリント基板内のケミコンの極性表示はΘ表示です。)

ADJUSTMENT—1(TX—Z7000H)



1. Clock Frequency Adjustment
   Settings: · Test point: TP1
   · Adjustment location: TC5
   Method: Set to AM 1602kHz and adjust so that the test point becomes 2052kHz±0.01kHz.

2. AM VT Check
   Settings: · Test point: TP2 (VT)
   Method: Set to AM 531kHz and check so that the test point becomes 1.1V±0.20V.

3. AM Tracking Check
   Settings: · Test point: TP-OUT (WH802)
   Method: Set to AM 999kHz and check so that the sensitivity becomes less than 56dB.

4. AM IF Adjustment
   Settings: · Test point: TP-OUT (WH802)
   L11 ····· 450kHz

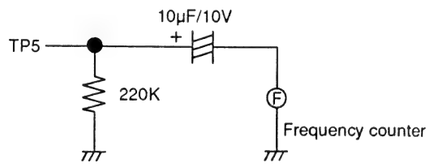
5. FM VT Adjustment
   Settings: · Test point: TP2 (VT)
   · Adjustment location: L6
   Method: Set to FM 108.0MHz and adjust L6 so that the test point becomes 9.0V±0.05V.

6. FM Tracking Adjustment
   Settings: · Test point: TP-OUT (WH802)
   TC1, 2 ····· 108.0MHz
   L2, 4 ····· 87.5MHz

7. FM IF Adjustment
   Settings: · Test point: TP-OUT (WH802)
   L8 ····· 10.7MHz

8. DC Balance Adjustment
   Settings: · Test point: TP3, 4 TP-OUT (WH802) (Distortion)
   · Adjustment location: L9
   Method: Set to FM 98.0MHz and adjust L9 so that TP3 and TP4 output becomes 0V±0.02V.
   Next, check so that the distortion becomes less than 0.6%.

9. MPX VCO Adjustment
   Settings: · Test point: TP5
   · MODE SW: STEREO
   · Adjustment location: SFR2
   Method: Connect a capacitor and resitor as below. Set to FM 98.0MHz non modulation and adjust so that the frequency at test point becomes 38kHz±0.05kHz.



10. Separation Check
    Settings: · Test point: TP-OUT (WH802)
    Method: Set to FM 98.0MHz and check the separation at TP-OUT becomes more than 27dB.

11. Light on tunning LED Adjustment
    Settings: · Adjustment location: SFR1
    · Input level: 18dB
    Method: Set to FM 98.0MHz and adjust TUNNING LED to light on by SFR1. After that, LED goes out by 2dB down.

PRACTICAL SERVICE FIGURE —1
(TX—Z7000 H)

<FM SECTION>

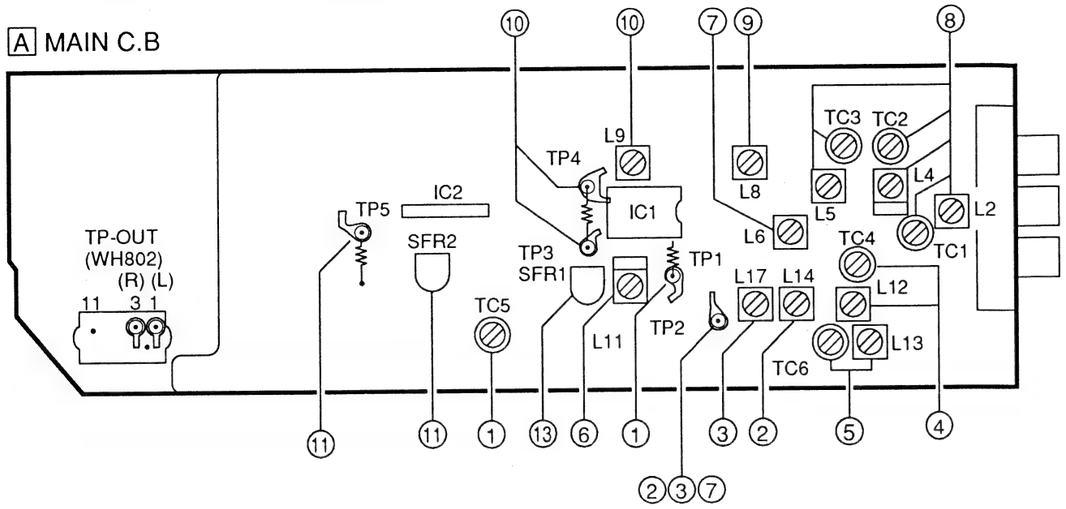
IHF Sensitivity:	4±4dB (at 87.5MHz)
(THD 3%)	2±3dB (at 98.0／108.0MHz)
S/N 50dB Quieting Sensitivity:	Less than 34dB (at 87.5／98.0／108.0MHz)
Signal to Noise Ratio: (MONO)	More than 72dB (at 98.0MHz) (STEREO) More than 65dB (at 98.0MHz)
Distortion:	(MONO) Less than 0.6% (at 98.0MHz) (STEREO) Less than 1.5% (at 98.0MHz)
Stereo Separation:	More than 27dB
Intermediate Frequency:	10.7MHz

<AM SECTION>

Sensitivity:	56±4dB (at 603kHz)
(S／N 20dB)	52±4dB (at 999／1404kHz)
Distortion:	Less than 1.5% (at 999kHz)
Intermediate Frequency:	450kHz

ADJUSTMENT—2 (TX—Z7000E, Z)

A MAIN C.B



1. Clock Frequency Adjustment
   Settings: · Test point: TP1
   · Adjustment location: TC5
   Method: Set to MW 1611kHz and adjust so that the test point becomes 2061kHz±0.01kHz.

2. MW VT Adjustment
   Settings: · Test point: TP2 (VT)
   · Adjustment location: L14
   Method: Set to MW 522kHz and adjust L14 so that the test point becomes 1.0V±0.05V.

3. LW VT Adjustment
   Settings: · Test point: TP2 (VT)
   · Adjustment location: L17
   Method: Set to LW 144kHz and adjust L17 so that the test point becomes 1.3V±0.05V.

4. MW Tracking Adjustment
   Settings: · Test point: TP-OUT (WH802)
   L12 ····· 603kHz
   TC4 ····· 1,404kHz

5. LW Tracking Adjustment
   Settings: · Test point: TP-OUT (WH802)
   L13 ····· 144kHz
   TC6 ····· 290kHz

6. AM IF Adjustment
   Settings: · Test point: TP-OUT (WH802)
   L11 ····· 450kHz

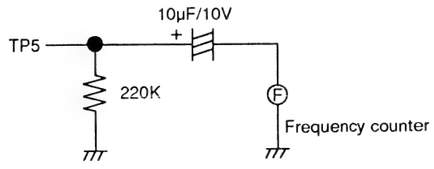
7. FM VT Adjustment
   Settings: · Test point: TP2 (VT)
   · Adjustment location: L6
   Method: Set to FM 108.0MHz and adjust L6 so that the test point becomes 9.0V±0.05V.

8. FM Tracking Adjustment
   Settings: · Test point: TP-OUT (WH802)
   L2, 4 ····· 87.5MHz (E)
   L2, 4, 5 ····· 87.5MHz (Z)
   TC1, 2 ····· 108.0MHz (E)
   TC1, 2, 3 ····· 108.0MHz (Z)

9. FM IF Adjustment
   Settings: · Test point: TP-OUT (WH802)
   L8 ····· 10.7MHz

10. DC Balance Adjustment
    Settings: · Test point: TP3, 4 TP-OUT (WH802) (Distortion)
    · Adjustment location: L9
    Method: Set to FM 98.0MHz and adjust L9 so that TP3 and TP4 output becomes 0V±0.02V.
    Next, check so that the distortion becomes less than 0.6%.

11. MPX VCO Adjustment
    Settings: · Test point: TP5
    · MODE SW: STEREO
    · Adjustment location: SFR2
    Method: Connect a capacitor and resitor as below. Set to FM 98.0MHz non modulation and adjust so that the frequency at test point becomes 38kHz±0.05kHz.



12. Separation Check
    Settings: · Test point: TP-OUT (WH802)
    Method: Set to FM 98.0MHz and check the separation at TP-OUT becomes more than 27dB.

13. Light on tunning LED Adjustment
    Settings: · Adjustment location: SFR1
    · Input level: 18dB
    Method: Set to FM 98.0MHz and adjust TUNNING LED to light on by SFR1. After that, LED goes out by 2dB down.

PRACTICAL SERVICE FIGURE—2 (TX—Z7000E, Z)

<FM SECTION>

Usable Sensitivity:	4±4dB (at 87.5MHz) (E)
(THD 3%)	8±4dB (at 87.5MHz) (Z)
	2±4dB (at 98.0/108.0MHz) (E)
	6±4dB (at 98.0/108.0MHz) (Z)
S/N 50dB Quieting Sensitivity:	
	Less than 34dB
	(at 87.5/98.0/108.0MHz) (E)
	Less than 38dB
	(at 87.5/98.0/108.0MHz) (Z)
Signal to Noise Ratio: (MONO)	
	More than 72dB (at 98.0MHz) (E)
	More than 68dB (at 98.0MHz) (Z)
	(STEREO)
	More than 65dB (at 98.0MHz) (E)
	More than 60dB (at 98.0MHz) (Z)
Total Harmonic Distortion:	
	(MONO)
	Less than 0.6% (at 98.0MHz)
	(STEREO)
	Less than 1.5% (at 98.0MHz)
Stereo Separation:	More than 27dB
Intermediate Frequency:	
	10.7MHz

<MW SECTION>

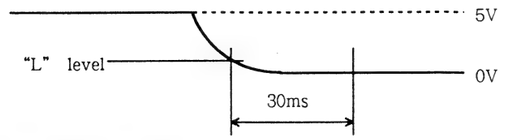
Sensitivity:	56±4dB (at 603kHz)
(S/N 20dB)	52±4dB (at 999/1404kHz)
Total Harmonic Distortion:	
	Less than 1.5% (at 999kHz)
Intermediate Frequency:	
	450kHz

<LW SECTION>

Sensitivity:	63±5dB (at 144kHz)
(S/N 20dB)	60±5dB (at 198/290kHz)
Total Harmonic Distortion:	
	Less than 1.2% (at 198 kHz)
Intermediate Frequency:	
	450kHz

IC DESCRIPTION (TX – Z7000)

IC, μ PD75268CW – 029

Pin No.	Pin Name	I/O	Description
1~4	Sd~Sg	O	FL display segment signal outputs, key scan signal outputs. Active "H"
5	$\overline{PBK}$	I	Power failure detection input. When "L" level continues for 30 ms or more, a power failure is detected (the unit enters the backup mode). 
6	———	–	Not used (connected to ground).
7	AUTO – L	O	When an FM broadcast is received, this pin outputs a signal depending on the AUTO condition selected by the MODE key. Active "L" when the AUTO indicator lights. • Even if the AUTO indicator changes when the frequency is being set during timer programming, the output follows the condition currently received.
8	———	–	Not used (connected to ground).
9	REMOCON	I	Serial data input for remote control. Active "H" (the rise is detected).
10	———	–	Not used (connected to ground).
11	———	–	Not used (connected to ground).
12	POW SW	I/O	Power control input port. The power is turned on and off a alternately each time the power switch of the amplifier is pressed.
13	B0	I	These input pins select the frequency range, etc. with the 3 bits depending on the destination of the units.
14	B2		
15	B1		
16	$\overline{SD}$	I	Input to stop auto scanning. Active "L". • The input is not accepted during power off. • The input cause "TUNE" to light. • Searches for SD signals every 5 ms during auto scanning. When 4 "L" pulses are conuted, sacnning will stop. • SD is not detected during manual tuning.
17	$\overline{STEREO}$	I	Input which causes the $\overline{STEREO}$ indicator to light. Active "L". • This input is not accepted during power off.
18	$\overline{K \cdot MUTE}$	O	Outputs a muting signal when a key is operated.
19	$\overline{SER\ I/O}$	I/O	8 – bit serial data input/output.
20	T – BASE	I	Receives 8Hz pulses from the PLL (LC7218) as a clock signal timing.
21~24	KO~K3	I	Key matrix inputs (K2 and K3 are not used and connected to ground).
25	TEST1	I	Test mode setting inputs.
26	TEST2		
27	TEST3		
28	AC CLK	I	Receives the commercial power frequency (the AC level is 5V) as a reference signal for the clock. Not used (connected to ground).
29	———	–	Not used (not connected).
30	X1	–	A ceramic oscillator which generates the main system clock signal (4.19MHz) is connected.
31	X2		
32	GND	–	Ground pin.
33	XT1	–	Not used (connected to ground).
34	XT2		Not used (not connected).
35	POW ON	–	Not used (not connected). Goes "H"during power on and "L"during power off.
36	CE	O	Output ports which transmit serial data to the PLL (LC7218). Active "H".
37	DATA		
38	CLK		
39	$\overline{RESET}$	I	System reset input. When the TUNER MODE and BAND switches are pressed and held for 1 second, the clock and preset stations are reset.

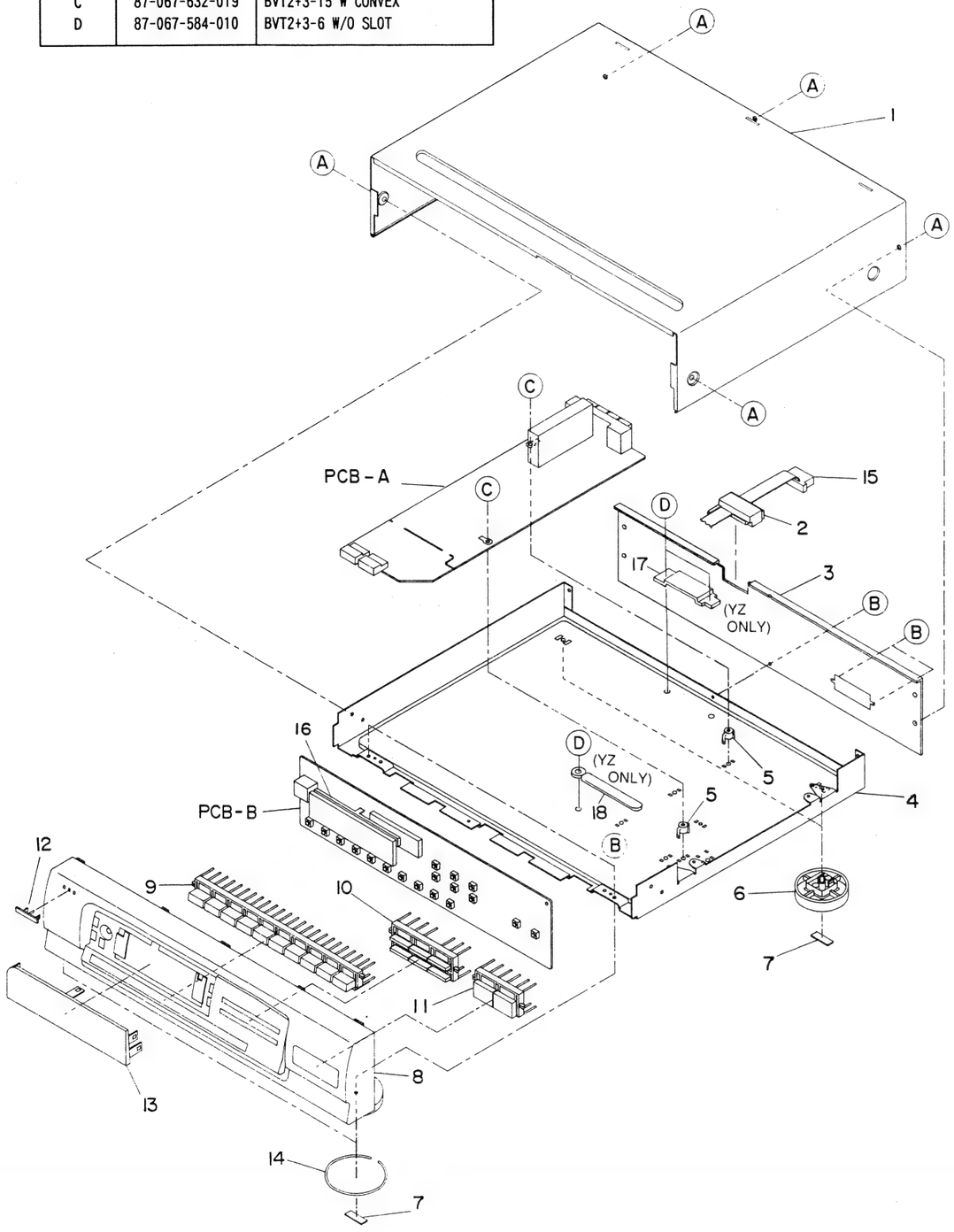
Pin No.	Pin Name	I/O	Description
40~48	D1~D9	O	FL display digit outputs.
49	———	–	Not used (not connected).
50	Sn	O	FL display segment outputs.
51	Sm		
52	Sℓ		
53	Sk		
54	———	–	Not used (not connected).
55	———		
56	V LOAD	I	Supplies power (– 25V) to the output buffer of the FL display driver.
57	V PRE	I	Connected to ground.
58	Sj	O	FL display segment outputs.
59	Si		
60	Sh		
61	Sa		
62	Sb		
63	Sc		
64	VDD	–	+ 5V power terminal.

IC, LC7218

Pin No.	Pin Name	I/O	Description
1 24	X IN X OUT	–	Clock oscillator connection pins. A 7.2MHz crystal oscillator is connected.
2 3 4	CE DATA CLK	I	When a key is operated, signals are transferred from the CPU. Active "H".
5 ~ 8	———	–	Unused (Not connected).
9	T – BASE	O	Outputs an 8Hz signal. Transfers it to the CPU as a time base clock signal.
10	———	–	Unused (Not connected).
11	———	O	Unused (Not connected).
12	AUTO – H	–	Outputs "H" when FM stereo switching is set to AUTO.
13	MW (AM) – L	O	Outputs "L" when an MW (AM) broadcast is received.
14 15 16	———	–	Unused (Not connected).
17	FM – L	O	Outputs "L" when an FM broadcast is received.
18	AM – IN	I	AM local oscillation input.
19	FM – IN	I	FM local oscillation input.
20	VDD	–	Power supply pin. 5V ± 10%
21	EO_1	O	PLL error output.
22	EO_2	–	Unused (Not connected).
23	VSS	–	Ground pin.

EXPLODED VIEW (TX－Z7000)

REF. NO.	PART NO.	DESCRIPTION
A	87-067-641-019	UTT2+3-8 W/O SLOT BLK
B	87-067-660-019	BVT2+3-8 W/O SLOT BLK
C	87-067-632-019	BVT2+3-15 W CONVEX
D	87-067-584-010	BVT2+3-6 W/O SLOT



MECHANICAL PARTS LIST (TX－Z7000)

DESCRIPTIONで判断できない物は"REFERENCE NAME LIST" を参照してください。
If can't understand for Description please kindly refer to "REFERENCE NAME LIST".

PART NO. CHANGED TO	REF. NO.	PART NO.	DESCRIPTION	COMMON MODEL	Q,TY
	1	★82-VT1-009-119	CAB, STEEL	※	1
	2	★89-VT5-202-010	BUSHING, CORD		1
	3	★82-VT1-010-019	PANEL, REAR YHJBN (YH)	※	1
	3	★82-VT1-016-019	PANEL, REAR YLHJBN (YLH)	※	1
	3	★82-VT1-012-019	PANEL, REAR YEBNE (YE)	※	1
	3	★82-VT1-013-019	PANEL, REAR YZBNE (YZ)	※	1
	4	---	CHASSIS, MAIN		1
	5	---	HOLDER, PCB		2
	6	★81-VX1-012-019	FOOT, REAR		2
	7	★82-VW2-211-019	FELT, 20－7.5－2		4
	8	★82-VT1-007-119	CAB, FR EX	※	1
	9	★82-VT1-002-119	KEY, 10	※	1
	10	★82-VT1-003-019	KEY, BAND	※	1
	11	★82-VT1-004-019	KEY, UP／DOWN	※	1
	12	★81-DS1-011-019	BADGE, AIWA N		1
	13	★82-VT1-005-019	WINDOW, TU	※	1
	14	★81-VW1-015-019	RING FOOT		2
	15	★82-VT1-605-010	CORD, FG 11P	※	1
	16	★81-690-201-110	GUIDE, FL		1
	17	★81-VX1-210-110	HLDR, WIRE G (YZ)		1
	18	★87-038-039-010	WIRE, BINDER (YZ)		1

MODEL NO.

GE－Z7000

CAUTIONS WHEN SERVICING (GE－Z7000)

Model GE－Z7000 does not have a power supply circuit and a control circuit.
When servicing the GE－Z7000, connect it to the MX－Z7000M.

ELECTRICAL MAIN PARTS LIST (GE－Z7000)

DESCRIPTIONで判断できない物は “REFERENCE NAME LIST” を参照してください。
If can't understand for Description please kindly refer to “REFERENCE NAME LIST”.

REF. NO	PART NO.	ｶﾝﾘ NO.	DESCRIPTION
IC			
	82-VU1-631-010		IC, LC65204A-4B13
	87-002-950-019		IC, BA3826S
	87-001-637-089		IC, NJM78ML05A
TRANSISTOR			
	89-320-011-089		TR, 2SC2001K
	87-026-269-089		TR, DTA114ES
	87-026-245-089		TR, DTC114ES
	89-333-284-089		TR, 2SC3328 Y
	89-110-155-089		TR, 2SA1015GR
DIODE			
	87-020-123-089		DIODE DS446-AT (TA)
	87-027-323-089		ZENER, HZ22-2L
	87-027-347-089		ZENER, HZ182LT2
	87-020-691-089		DIODE, 1SS132 T-72
MAIN C.B			
C20	87-010-405-089		CAP, E 10-50 SME
C21	87-018-209-089		CAP, TC-U 0.1-50 F
C22	87-010-075-089		CAP, E 10-16 5L
C23	87-010-408-089		CAP, E 47-50 SME
C24	87-014-061-089		CAP, PP 1500P-100 J
C25	87-015-699-089		CAP, E 10-50 7L
C26	87-018-134-089		CAP, TC-U 0.01-16 Y
C27	87-010-404-089		CAP, E 4.7-50 SME
C28	87-010-405-089		CAP, E 10-50 SME
C30	87-010-071-089		CAP, E 1-50 5L
C31	87-018-131-089		CAP, TC-U 1000P-50 B
C32	87-018-131-089		CAP, TC-U 1000P-50 B
C33	87-018-134-089		CAP, TC-U 0.01-16 Y
C34	87-018-134-089		CAP, TC-U 0.01-16 Y
C35	87-018-134-089		CAP, TC-U 0.01-16 Y
C36	87-018-134-089		CAP, TC-U 0.01-16 Y
C37	87-018-127-089		CAP, TC-U 470P-50 B
C38	87-018-127-089		CAP, TC-U 470P-50 B
C43	87-014-123-089		CAP, PP 0.068-100 G
C44	87-010-101-089		CAP, E 220-16 SME
FL1	82-VU1-630-010		FL, BJ126GK
FL2	82-VU1-630-010		FL, BJ126GK
L1	87-003-136-089		COIL, 100UH
L3	87-003-147-089		COIL, 22UH
R82	87-022-473-059		RES, NF 1.8-1/4WJ
R83	87-022-473-059		RES, NF 1.8-1/4WJ
S1	87-036-215-089		SW, TACT EVQ21404M〈YJ〉
S1	87-036-259-088		SW, TACT SKHVBB〈Y〉
S2	87-036-215-089		SW, TACT EVQ21404M〈YJ〉
S2	87-036-259-088		SW, TACT SKHVBB〈Y〉
S3	87-036-215-089		SW, TACT EVQ21404M〈YJ〉
S3	87-036-259-088		SW, TACT SKHVBB〈Y〉
S4	87-036-215-089		SW, TACT EVQ21404M〈YJ〉
S4	87-036-259-088		SW, TACT SKHVBB〈Y〉
S5	87-036-215-089		SW, TACT EVQ21404M〈YJ〉
S5	87-036-259-088		SW, TACT SKHVBB〈Y〉
S6	87-036-215-089		SW, TACT EVQ21404M〈YJ〉
S6	87-036-259-088		SW, TACT SKHVBB〈Y〉
S7	87-036-215-089		SW, TACT EVQ21404M〈YJ〉
S7	87-036-259-088		SW, TACT SKHVBB〈Y〉
S8	87-036-215-089		SW, TACT EVQ21404M〈YJ〉
S8	87-036-259-088		SW, TACT SKHVBB〈Y〉
S9	87-036-215-089		SW, TACT EVQ21404M〈YJ〉
S9	87-036-259-088		SW, TACT SKHVBB〈Y〉
S10	87-036-215-089		SW, TACT EVQ21404M〈YJ〉
S10	87-036-259-088		SW, TACT SKHVBB〈Y〉
S11	87-036-215-089		SW, TACT EVQ21404M〈YJ〉
S11	87-036-259-088		SW, TACT SKHVBB〈Y〉
S12	87-036-215-089		SW, TACT EVQ21404M〈YJ〉
S12	87-036-259-088		SW, TACT SKHVBB〈Y〉
S13	87-036-215-089		SW, TACT EVQ21404M〈YJ〉
S13	87-036-259-088		SW, TACT SKHVBB〈Y〉
S14	87-036-215-089		SW, TACT EVQ21404M〈YJ〉
S14	87-036-259-088		SW, TACT SKHVBB〈Y〉
S15	87-036-215-089		SW, TACT EVQ21404M〈YJ〉
S15	87-036-259-088		SW, TACT SKHVBB〈Y〉
S16	87-036-215-089		SW, TACT EVQ21404M〈YJ〉
S16	87-036-259-088		SW, TACT SKHVBB〈Y〉
S17	87-036-215-089		SW, TACT EVQ21404M〈YJ〉
S17	87-036-259-088		SW, TACT SKHVBB〈Y〉
S18	87-036-215-089		SW, TACT EVQ21404M〈YJ〉
S18	87-036-259-088		SW, TACT SKHVBB〈Y〉
S19	87-036-215-089		SW, TACT EVQ21404M〈YJ〉
S19	87-036-259-088		SW, TACT SKHVBB〈Y〉
S20	87-036-215-089		SW, TACT EVQ21404M〈YJ〉
S20	87-036-259-088		SW, TACT SKHVBB〈Y〉
T1	82-VU1-615-019		COIL, FL
WH1	82-VU1-632-019		CORD, 9P FG 55CM
X1	89-MX1-704-089		CERA LOCK (MU) 3.9MHZ
X2	89-MX1-704-089		CERA LOCK (MU) 3.9MHZ

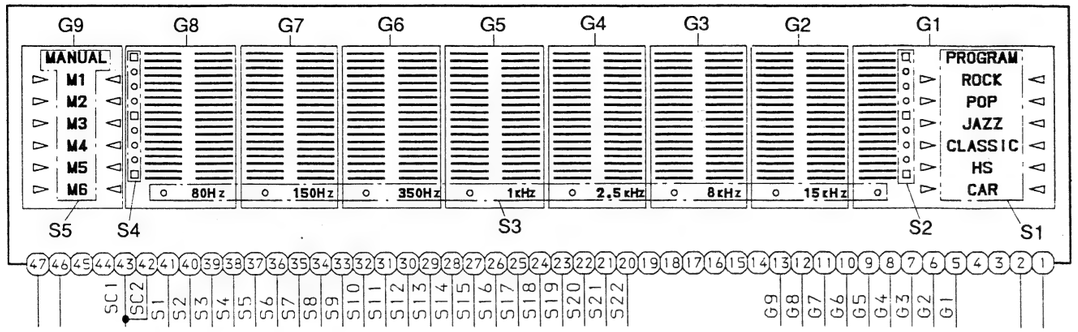
IC DESCRIPTION (GE－Z7000)

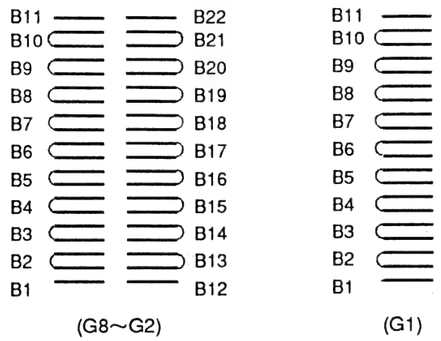
IC, LC65204A－4B13

Pin No.	Pin Name	I/O	Description
1	$\overline{S1}$	O	FL display segment output.
2	SC1/2	O	FL display control.
3	A	O	BA3826S output signal control.
4	B	O	
5	C	O	
6	AD5	I	Sound ditect input. (DC level)
7	AD6	I	A/D input for key input.
8	AD7	I	
9	AV+	－	Connected to +5V line.
10	AV－	－	GND.
11	VSS	－	GND.
12	OS1	－	X'tal terminal. (3.9MHz)
13	OS2	－	
14	VDD	－	Power supply. (+5V)
15	$\overline{RST}$	I	Reset signal input.
16	X1	I	Connected to +5V line.
17	X2	－	Not used. (not connected)
18	TEST	I	Connected to GND.
19	SI	I	Data input from CXP82324.
20	SO	O	Data output to CXP82324.
21	CLK	I	Clock signal input from CXP82324.
22	$\overline{CE}$	I	Strobe signal input from CXP82324.
23 ∫ 26	PC0 ∫ PC3	O	FL display grid drive signals.
27 ∫ 30	PD0 ∫ PD3	O	FL display grid drive signals.
31 ∫ 34	PK0 ∫ PK3	O	FL display segment outputs.
35 ∫ 38	PL0 ∫ PL3	O	
39 ∫ 42	PM0 ∫ PM3	O	
43 ∫ 46	PN0 ∫ PN3	O	
47 ∫ 50	PO0 ∫ PO3	O	
51	PP0	O	
52	VP	I	FL display power supply. (－30V)

FL, BJ126GK

GRID ASSIGNMENT

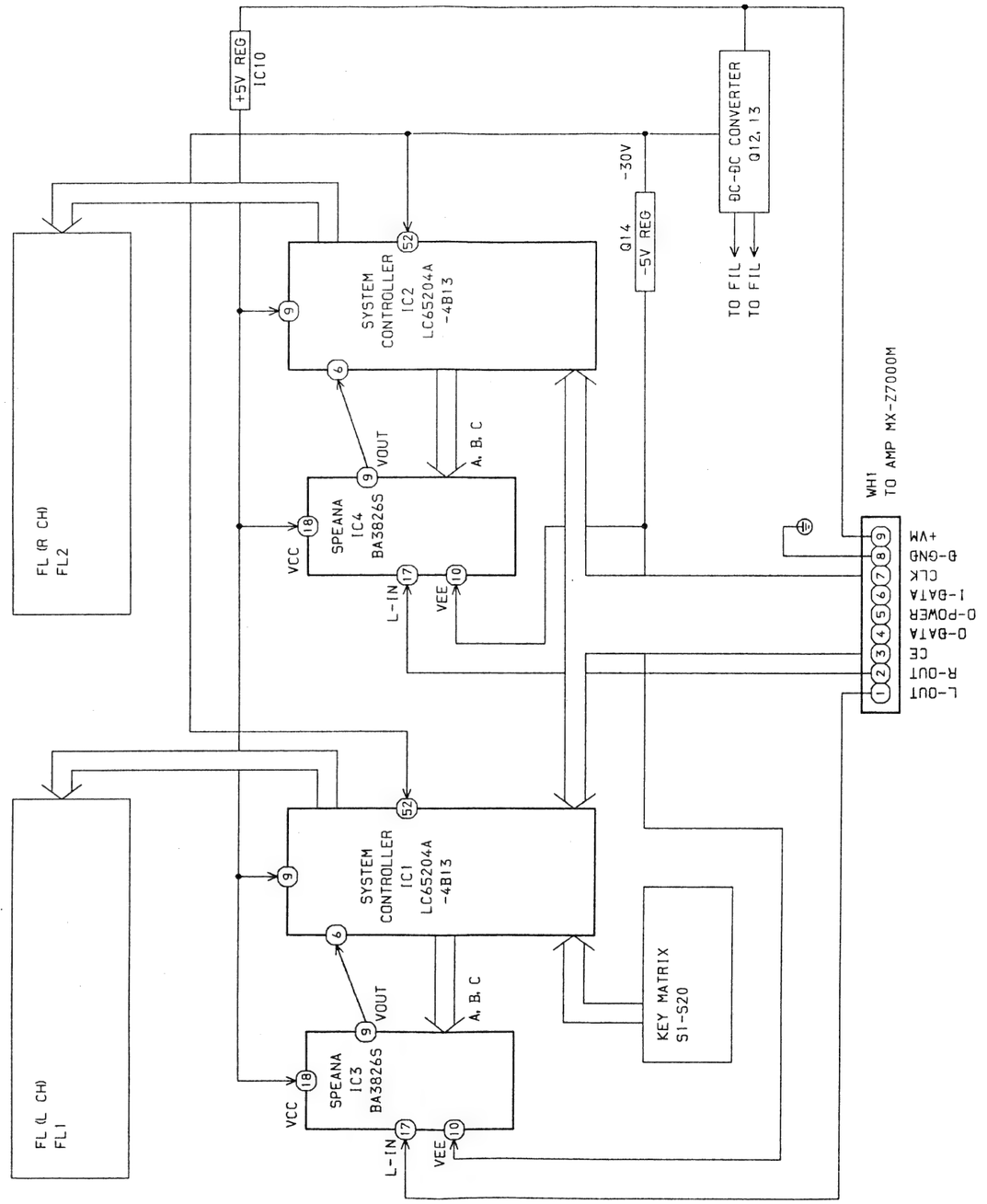


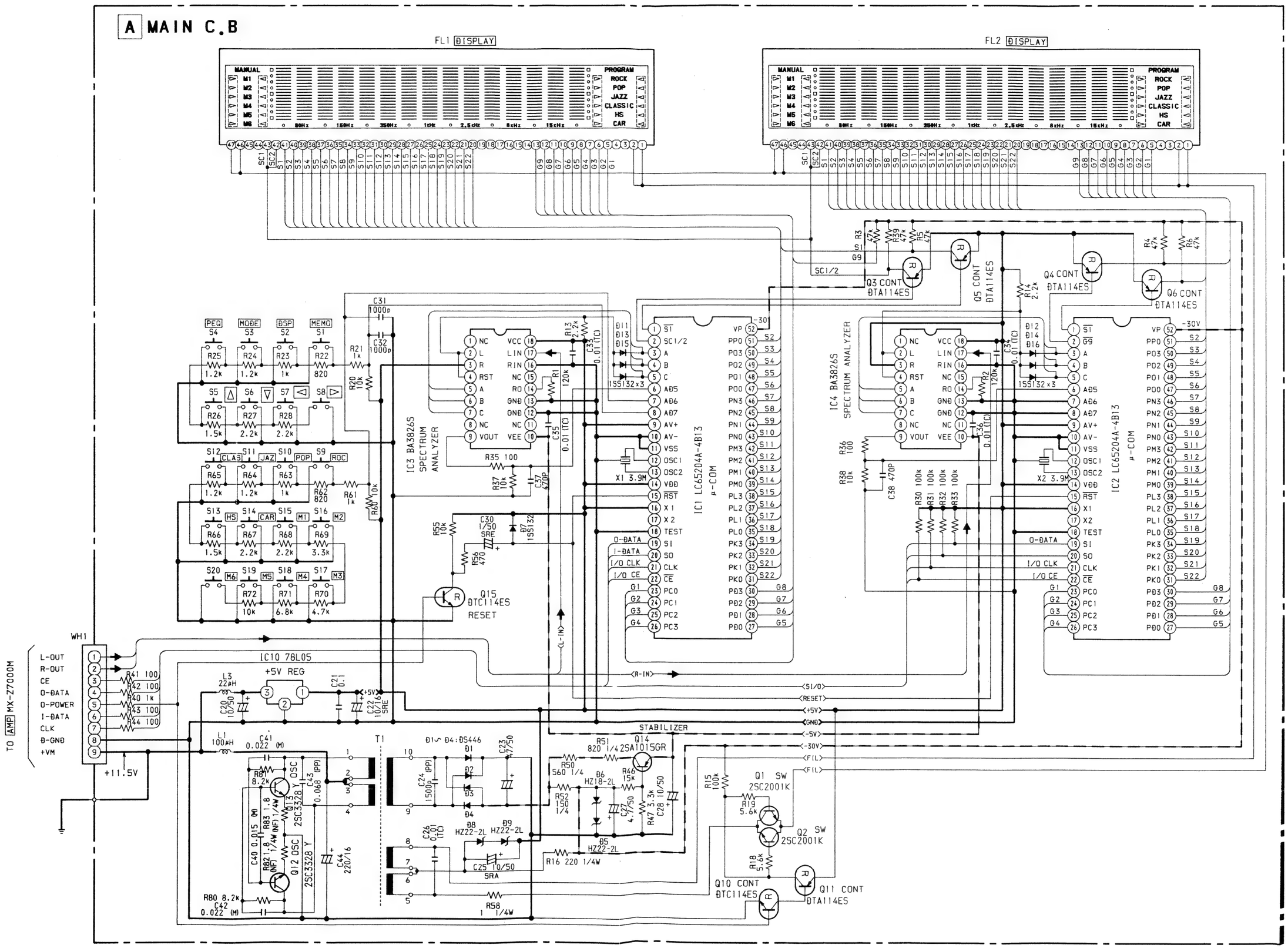


ANODE CONNECTION

	G9	G8	G7	G6	G5	G4	G3	G2	G1
P1	▽ (M6) ◁	B1	B1	B1	B1	B1	B1	B1	B1
P2	▽ (M5) ◁	B2	B2	B2	B2	B2	B2	B2	B2
P3	▽ (M4) ◁	B3	B3	B3	B3	B3	B3	B3	B3
P4	▽ (M3) ◁	B4	B4	B4	B4	B4	B4	B4	B4
P5	▽ (M2) ◁	B5	B5	B5	B5	B5	B5	B5	B5
P6	▽ (M1) ◁	B6	B6	B6	B6	B6	B6	B6	B6
P7	S5	B7	B7	B7	B7	B7	B7	B7	B7
P8	—	B8	B8	B8	B8	B8	B8	B8	B8
P9	—	B9	B9	B9	B9	B9	B9	B9	B9
P10	—	B10	B10	B10	B10	B10	B10	B10	B10
P11	—	B11	B11	B11	B11	B11	B11	B11	B11
P12	—	B12	B12	B12	B12	B12	B12	B12	▽ (CAR) ◁
P13	—	B13	B13	B13	B13	B13	B13	B13	▽ (HS) ◁
P14	—	B14	B14	B14	B14	B14	B14	B14	▽(CLASSIC)◁
P15	—	B15	B15	B15	B15	B15	B15	B15	▽ (JAZZ) ◁
P16	—	B16	B16	B16	B16	B16	B16	B16	▽ (POP) ◁
P17	—	B17	B17	B17	B17	B17	B17	B17	▽(ROCK)◁
P18	—	B18	B18	B18	B18	B18	B18	B18	S1
P19	—	B19	B19	B19	B19	B19	B19	B19	—
P20	—	B20	B20	B20	B20	B20	B20	B20	—
P21	—	B21	B21	B21	B21	B21	B21	B21	—
P22	—	B22	B22	B22	B22	B22	B22	B22	—
P23	—	S4	—	—	—	—	—	—	S2
P24	—	S3	S3	S3	S3	S3	S3	S3	—

BLOCK DIAGRAM (GE—Z7000)

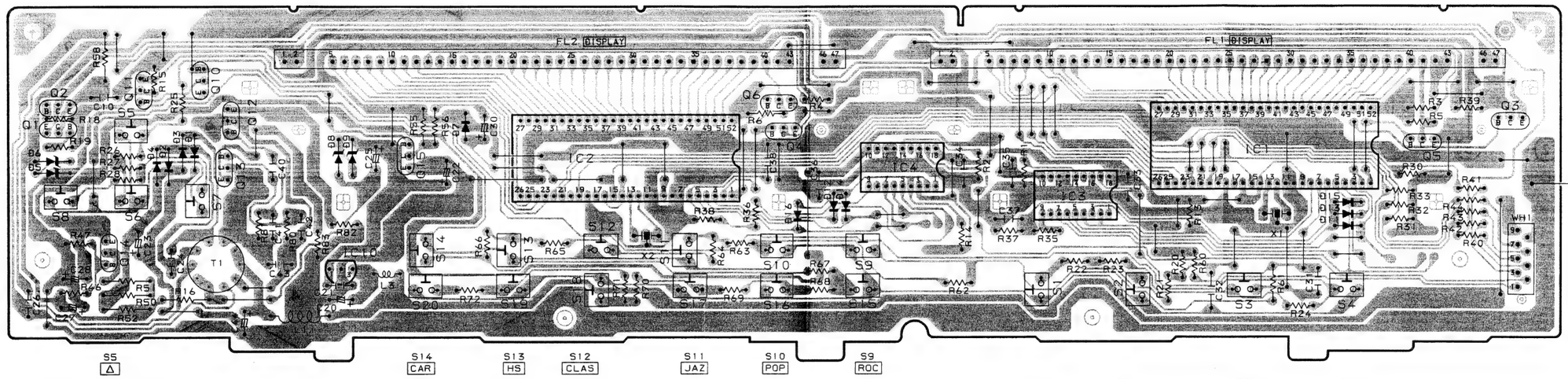



A MAIN C.B
FL1 DISPLAY
FL2 DISPLAY
MANUAL
PROGRAM
ROCK
POP
JAZZ
CLASSIC
HS
CAR
IC1 LC65204A-4B13 μ-COM
IC2 LC65204A-4B13 μ-COM
IC3 BA3826S SPECTRUM ANALYZER
IC4 BA3826S SPECTRUM ANALYZER
IC10 78L05 +5V REG
Q1 SW 2SC2001K
Q2 SW 2SC2001K
Q3 CONT DTA114ES
Q4 CONT DTA114ES
Q5 CONT DTA114ES
Q6 CONT DTA114ES
Q10 CONT DTC114ES
Q11 CONT DTA114ES
Q12 OSC 2SC3328 Y
Q13 OSC 2SC3328 Y
Q14 2SA1015GR
Q15 DTC114ES RESET
STABILIZER
TO AMP MX-Z7000M
WH1
L-OUT
R-OUT
CE
O-DATA
O-POWER
I-DATA
CLK
B-GND
+VM
+11.5V
PEQ
MODE
DSP
MEMO
CLAS
JAZ
POP
ROC
HS
CAR
M1
M2
M3
M4
M5
M6
<SI/O>
<RESET>
<+5V>
<GND>
<-5V>
<-30V>
<FIL>
<FIL>
<L-IN>
<R-IN>

1 2 3 4 5 6 7 8 9 10 11 12 13 14

A B C D E F G H I J

A MAIN C.B



S5 △ S8 ◁ S6 ▽ S7 ▷

S14 CAR S20 M6 | S13 HS S19 M5 | S12 CLAS S18 M4 | S11 JAZ S17 M3 | S10 POP S16 M2 | S9 ROC S15 M1

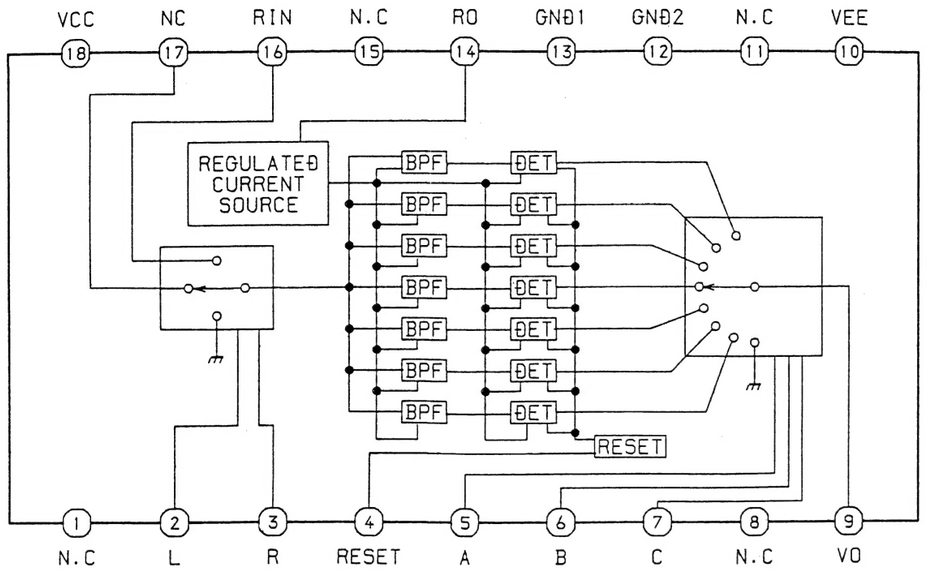
S1 MEMO | S2 DSP | S3 MODE | S4 PEQ

GRAPHIC SYMBOLS PRINTED CIRCUIT BOARD OF ELECT. CAP. ARE DESIGNED AS NEGATIVE POLE.

(プリント基板内のケミコンの極性表示はθ表示です。)

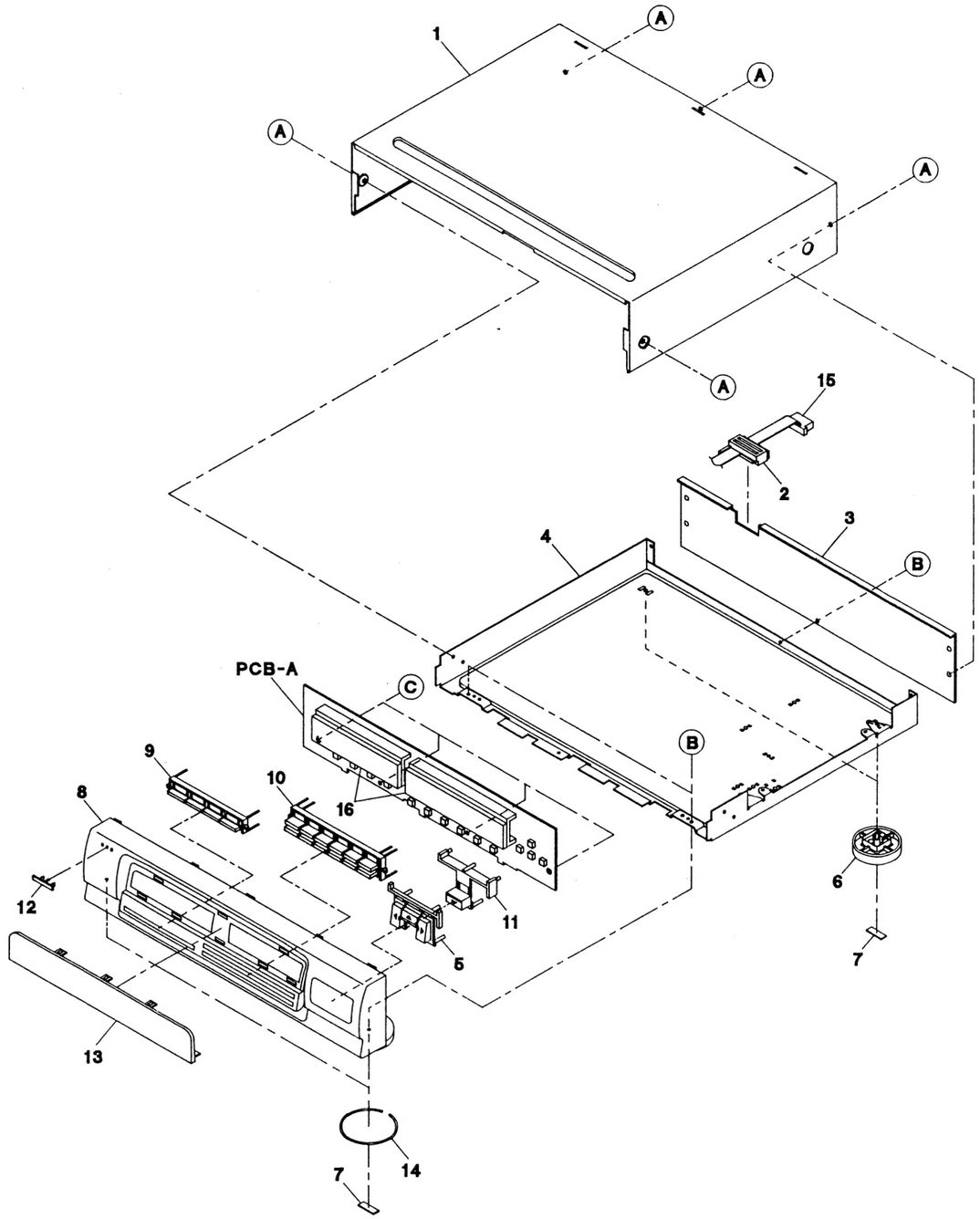
IC BLOCK DIAGRAM (GE−Z7000)

IC, BA3826S



EXPLODED VIEW (GE−Z7000)

REF. NO.	PART NO.	DESCRIPTION
A	87-067-641-019	UTT2+3-8 W/O SLOT BLK
B	87-067-660-019	BVT2+3-8 W/O SLOT BLK
C	87-067-703-019	BVT2+3-10 W/O SLOT



MECHANICAL PARTS LIST (GE－Z7000)

DESCRIPTIONで判断できない物は "REFERENCE NAME LIST" を参照してください。
If can't understand for Description please kindly refer to "REFERENCE NAME LIST".

PART NO. CHANGED TO	REF. NO.	PART NO.	DESCRIPTION	COMMON MODEL	Q,TY
	1	★82-VT1-009-119	CAB, STEEL		1
	2	★89-VT5-202-010	BUSHING, CORD		1
	3	★82-VU1-012-019	PANEL, REAR YBNE (Y)	※	1
	3	★82-VU1-014-019	PANEL, REAR YJBN (YJ)	※	1
	4	---	CHAS, MAIN		1
	5	★82-VU1-004-019	KEY, UP	※	1
	6	★81-VX1-012-019	FOOT, REAR		2
	7	★82-VW2-211-019	FELT 20－7.5－2		4
	8	★82-VU1-001-019	CAB, FR	※	1
	9	★82-VU1-002-019	KEY, 1	※	1
	10	★82-VU1-003-019	KEY, 2	※	1
	11	★82-VU1-005-019	KEY, DOWN	※	1
	12	★81-DS1-011-019	BADGE, AIWA N		1
	13	★82-VU1-006-019	WINDOW	※	1
	14	★81-VW1-015-019	RING, FRONT		2
	15	★82-VU1-632-019	CORD, 9P FG55CM	※	1
	16	★81-DS2-204-219	GUIDE FL		1

MODEL NO.

SX – Z7000

■ SPEAKER LIST (SX – Z7000)

REF. NO.	PART NO.	DESCRIPTION
1	82-VS1-003-010	PANEL W
2	82-VS1-004-010	PANEL T ASSY
3	82-VS1-010-010	GRILL FRAME ASSY
4	82-VS2-602-010	SPEAKER WOOFER
5	82-VS1-603-010	SPEAKER TWEETER
6	81-672-612-010	SPEAKER CORD (H,HE,HR)
7	82-VS2-025-010	SPEAKER CORD (E,K,Z)

REFERENCE NAME LIST

ELECTRICAL SECTION

DESCRIPTION	REFERENCE NAME
ANT	ANTENNAS
C-	CHIP
C-CAP	CAP, CHIP
C-CAP TN	CAP, CHIP TANTALUM
C-COIL	COIL, CHIP
C-DI	DIODE, CHIP
C-DIODE	DIODE, CHIP
C-FET	FET, CHIP
C-FOTR	FILTER, CHIP
C-JACK	JACK, CHIP
C-LED	LED, CHIP
C-RES	RES, CHIP
C-SFR	SFR, CHIP
C-SLIDE SW	SLIDE SWITCH, CHIP
C-SW	SWITCH, CHIP
C-TR	TRANSISTOR, CHIP
C-VR	VOLUME, CHIP
C-ZENER	ZENER, CHIP
CAP, CER	CAP, CERA-SOL
CAP, E	CAP, ELECT
CAP, M/F	CAP, FILM
CAP, TC	CAP, CERA-SOL
CAP, TC-U	CAP, CERA-SOL SS
CAP, TN	CAP, TANTALUM
CERA FIL	FILTER, CERAMIC
CF	FILTER, CERAMIC
DL	DELAY LINE
E/CAP	CAP, ELECT
FILT	FILTER
FLTR	FILTER
FUSE RES	RES, FUSE
MOT	MOTOR
P-DIODE	PHOTO DIODE
P-SNSR	PHOTO SENSER
P-TR	PHOTO TRANSISTOR
POLY VARI	VARIABLE CAPACITOR
PPCAP	CAP, PP
PT	POWER TRANSFORMER
PTR, RES	PTR, MELF
RC	REMOTE CONTROLLER
RES NF	RES, NON-FLAMMABLE
RESO	RESONATOR
SHLD	SHIELD
SOL	SOLENOID
SPKR	SPEAKER
SW, LVR	SWITCH, LEVER
SW, RTRY	SWITCH, ROTARY
SW, SL	SWITCH, SLIDE
TC CAP	CAP, CERA-SOL
THMS	THERMISTOR
TR	TRANSISTOR
TRIMMER	CAP, TRIMMER
TUN-CAP	VARIABLE CAPACITOR
VIB, CER	RESONATOR, CERAMIC
VIB, XTAL	RESONATOR, CRYSTAL
VR	VOLUME
ZENER	DIODE, ZENER
ｻｰｼﾞｻﾌﾟﾚｯｻ	SERGESUPPRESSOR
ｾﾗｺﾝ	CAP, CERA

MECHANICAL SECTION

DESCRIPTION	REFERENCE NAME
ADHESHIVE	SHEET ADHESHIVE
AZ	AZIMUTH
BAR-ANT	BAR-ANTENNA
BAT	BATTERY
BAT, CONTACT ASSY	BATTERY CONTACT ASSY
BATT	BATTERY
BRG	BEARING
BTN	BUTTON
CAB	CABINET
CASS	CASSETTE
CHAS	CHASSIS
CLR	COLLAR
CONT	CONTROL
CRSR	CURSOR
CU	CUSHION
CUSH	CUSHION
DIR	DIRECTION
DUBB	DUBBING
FL	FRONT LOADING
FLY-WHL	FLYWHEEL
FR	FRONT
FUN	FUNCTION
G-CU	G-CUSHION
HDL	HANDOL
HIMERON	CLOTH
HINGE, BAT	HINGE, BATTERY
HLDR	HOLDER
HT-SINK	HEAT SINK
IB	INSTRUCTION BOOKLET
IDLE	IDLER
IND, L-R	INDICATOR, L-R
KEY, CONT	KEY, CONTROL
KEY, PRGM	KEY, PROGRAM
KNOB, SL	KNOB, SLIDE
KNOB, VOL REV	KNOB, VOLUME REV
LBL	LABEL
LID, BATT	LID, BATTERY
LID, CASS	LID, CASSETTE
LVR	LEVER
P-SP	P-SPRING
PANEL, CONT	PANEL, CONTORL
PANEL, FR	PANEL, FRONT
PRGM	PROGRAM
PULLY, LOAD MO	PULLY, LOADING MOTOR
RBN	RIBBON
S-	SPECIAL
SEG	SEGMENT
SH	SHEET
SHLD-SH	SHIELD-SHEET
SL	SLIDE
SP	SPRING
SP-SCREW	SPECIAL-SCREW
SPACER, BAT	SPACER, BATTERY
SPR	SPRING
SPR-P	P-SPRING
SPR-PC-PUSH	P-SPRING, C-PUSH
SW	SWITCH
T-SP	T-SPRING
TERM	TERMINAL
TRIG	TRIGGER
TUN	TUNING
VOL	VOLUME
W	WASHER
WHL	WHEEL
WORM-WHL	WORM-WHEEL
ｼｸｱｰﾑ	ARM, SHAFT
ｼｸｶﾞｲﾄﾞ	GUIDE, SHAFT
ｽﾄﾗｯﾌﾟ	STRAP
ﾋﾝｼﾞ	HINGE